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ECONOMIC DEVELOPMENT AND PLANNING IN ASIA AND THE FAR EAST

Problems and Techniques

Economic Bulletin for Asia and the Far East
Vol. VI, No. 3. November 1955

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ECONOMIC BULLETIN FOR ASIA AND THE FAR EAST

Prepared by the

SECRETARIAT OF THE
ECONOMIC COMMISSION FOR ASIA AND THE FAR EAST

Vol. VI, No. 3. November 1955

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ECONOMIC DEVELOPMENT AND PLANNING IN ASIA AND THE FAR EAST

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Bangkok 1955

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NOTE BY THE EXECUTIVE SECRETARY

The *Report* adopted by the Working Party on Economic Development and Planning at the conclusion of its first meeting, in November 1955, helps bring into focus much of the thinking on this subject that has been going on in and concerning this part of the world for a number of years.

It will be recalled that the eleventh session of the Commission, in Tokyo, welcomed the establishment of a special section in the Secretariat to study problems and techniques of economic development and planning, and approved the organization of an inter-governmental working party to deal with the subject over a period of time and for that purpose to hold such meetings as might prove advisable.

Two Secretariat papers for the recently concluded meeting, dealing with "Problems and Techniques of Economic Development Planning and Programming with Special Reference to ECAFE Countries" and with "Statistics Required for Planning in the ECAFE Region", are included, with minor revisions, in this issue of our *Economic Bulletin*. I call them to the attention of all officials of member governments who are concerned with the important issues involved and of others interested in the subject. I think that a careful reading of these papers together with the *Report* tends to establish the point that there are certain principles and techniques of general value for the programming of economic development, despite all the difference in the circumstances of different countries.

I should like to add here that a number of valuable working papers were prepared and submitted by member governments and that others were supplied by specialized agencies, as listed in an appendix to the *Report* of the Working Party. These papers helped in providing useful background for discussion of the analytical and factual problems of development and in addition will continue to serve a useful purpose by providing material for further analyses which the Secretariat is making with a view to assembling additional reports for the use of member governments. This is a continuing project. We hope to conserve what is of value and to build up steadily as we go along.

I come now to the Working Party's *Report*. The *Report* is necessarily at a technical level and follows closely the annotated agenda which focussed attention on some analytical and economic problems involved in the programming of economic development. Nevertheless its bearing on practical issues is quite evident. Take for example the question of the need for capital. I believe that in Asia neither the governments nor the secretariat of the regional commission of the United Nations are inclined to give exaggerated attention to the question of capital, as though it were the sole determinant of economic growth. Indeed, the annotated agenda prepared for this meeting, no less than the general working paper, very strongly emphasized the parallel importance of a number of other major determinants, all of which help to decide how much output can be obtained with such capital as there may be. Nevertheless it is a fact, obvious to anyone, that a prime requirement for rapid advance in Asia today is more capital than the Asian countries themselves can muster by their own unaided efforts, and yet this way of putting it runs against the danger of obscuring the other requirements of growth, which in many respects may have a prior urgency. The discussion at the meeting of the Working Party showed quite clearly that many countries were quite aware of this relationship between capital and other requirements of growth and that among the reasons why they have not made precise estimates of the amount of capital that can be effectively put into use at various successive stages of economic development is precisely their awareness of the limitation of a mere capital estimation approach.

Many interesting points brought out in the discussion are set forth in the *Report*. The experts generally agreed, for example, that surplus labour offers a real opportunity for expansion of capital formation and of output generally, especially when mobilized through community development projects etc. The organizational

problems involved are, however, substantial; other limitations arising out of location, incentives, and cost-benefit considerations should not be under-rated. There was agreement that the most important needs other than for more capital are avoidance of instability (whether of external or internal origin), development of a stronger class of entrepreneurs, improvement of public administration, basic surveys of natural resources, more training facilities, and better production techniques.

The related discussion on the technical subject of capital/output ratios is worthy of special note. The technical and other limitations of this ratio as a tool in analysis, if used uncritically, stem from concentration on a single scarce productive factor to the exclusion of other equally relevant ones and from overlooking the effects of changing patterns of production and changing levels of efficiency of utilization of capital. The ratio has not been much used for planning in the region, but it was made clear that once the limitations are clearly borne in mind, it could serve in the aggregate sense to suggest how much investment will be needed to achieve a given planned output or, alternatively, how much increase in output can be expected from a given planned rate of investment; also that comparisons of sectoral or project capital/output ratios (or capital coefficients) may be useful in guiding investment provided care is taken to allow for differences in "gestation periods", indirect costs and benefits, and other relevant factors.

It was indicated that most countries of the region have not progressed beyond the point of planning an investment programme for the public sector and estimating or forecasting the accompanying performance of the private sector. There was general agreement that plans should be kept flexible and subject to modification in the face of unexpected circumstances (whether unfavourable, for example a decline in export proceeds, or favourable, for example an unforeseen enlargement of foreign aid), but that it usually is impractical to go so far as to prepare alternative plans for various contingencies; that it is possible but not always easy to achieve the objective of fuller employment without sacrificing the objective of higher productivity; that input-output analysis is not likely to be of much practical use in planning in the immediate future whereas commodity balances for important scarce items, as well as general resources budgeting, *e.g.* manpower, internal and external savings available to the community, etc., were definitely needed. In view of the importance of the foreign trade sector to several ECAFE countries, the budgeting of foreign exchange resources was felt to be of crucial importance.

There was some feeling that the role of the government in planning and programming is only very imperfectly indicated by defining boundaries for the public and private production sectors, since in virtually all countries of the region, despite differences in social philosophy, it remains true that government action both intermingles with and affects private action in a complex variety of ways. Indeed, the discussions brought out the fact that even in a private enterprise economy like the United States the role of government is quite significant and that the differences in this respect between the United States for example and some of the countries in the region, for example India, were less than were generally supposed.

While the Working Party agreed that there were clear advantages in drawing up definite development plans or programmes covering short periods, it was emphasized that the need for flexibility was particularly strong in the countries of the region because of the considerable susceptibility of their economies to external fluctuation. Foreign financial assistance should, it was felt, be not only adequate but assured to the extent possible. There was a clear consensus that such assistance would ideally be free from ties to specific projects—although I think it was generally conceded that in practice such ties are almost inevitable and need not in fact cause difficulty provided the assisted country has reached the point of having a clearly outlined plan and can flexibly dispose of the available domestic resources as among the various projects included in it.

It was also agreed that the planning agency, whatever its precise form of organization, should be centrally placed in the government, preferably under the Prime Minister himself, and with active participation also of the Finance Minister; that the function of collecting statistics should be closely coordinated with the function of planning for economic development, but that the planning agency should not dominate the statistical

agency; that an evaluation organization should be developed as part of the planning machinery; that first priority in statistics attaches to improvement in basic data on population, employment, output, trade, etc.; and that high priority also attaches to obtaining direct data on special strategic factors, perhaps through sample surveys, and to developing indicators of the performance and the impact of the plans.

I have mentioned a few points. The *Report* should, of course, be studied in its entirety.

On taking up the question of the agenda for its second meeting—tentatively scheduled, on our calendar, for September 1956—the Working Party gave particular attention to the fact that *implementation* of development programming had been largely omitted from the agenda this time. The major problems and major determinants of economic growth had been discussed, as well as the techniques of planning and programming, but the policies and devices whereby governments can control or influence the determinants and thus bring plans and programmes to fruition had been set aside as constituting too large a subject to be combined with the other items on the first agenda. Yet many of the conclusions reached in the discussion necessarily lacked finality and practicality in the absence of a thorough consideration of the effectiveness and the implications of the ways and means available for achieving objectives. The Working Party therefore recommended that the next meeting should deal broadly with the means of implementation of development programmes.

Either as an alternative or as a sequel to this, the Working Party considered that the topic to be taken up might be the problem of planning and of implementation in a specific major sector of the economies of the ECAFE region. The subject of agricultural development and that of industrial development, particularly in the private sector, were both suggested.

I should like in conclusion to refer very briefly to the recommendations relating to studies or other similar work which are contained in various parts of the *Report* and which are also recapitulated for convenience at the end. Although most of these studies fall within the scope of the Secretariat's work, it is clear that their successful completion will depend largely upon the extent to which countries themselves are engaged in or willing to undertake those studies. The implementation of these projects should be regarded conceptually as a joint effort by the governments and the Secretariat. Of the 14 items there brought together, nos. 1 and 2 are the recommendations I have already mentioned, dealing with the agenda for the next meeting of the Working Party itself. No. 5 bears some relation to these, since it asks ECAFE to consider calling a conference when evaluation studies on community development projects have accumulated. (Parenthetical mention may be made in this connection of our Project 02-05,[1] dealing with this subject, which we are now initiating with the assistance of the United Nations Bureau of Social Affairs.)

Nos. 13 and 14 have to do with technical assistance or advisory work. The former urges the need to provide for training of officials in planning organizations, while the latter sees a useful role for the ECAFE Secretariat in bringing about improvement of statistics in member countries, for example by making the services of experts available.

The other recommendations refer to studies as such. Nos. 9 and 10, dealing respectively with the formulation of commodity budgets for bottleneck commodities and with the desirability of gradually mastering the techniques of input-output analysis, probably were intended to be addressed primarily to the governments of the region. No. 5, asking for a fresh review of problems of population growth and policy, is already being taken into account in our Project 02-03, on the relationship between population growth and economic development, on which we expect to make substantial progress during 1956.

The six remaining recommendations would call for new studies not already clearly included in our work programme. Of these, I should judge that no. 11, referring to the need for further studies of the agricultural sector and its dependence on the rest of the economy, may be considered to be closely related to no. 2. In

1. For this and other projects referred to here, see *Annual Report of Economic Commission for Asia and the Far East to Economic and Social Council (20th Session)* (E/2712 or E/CN.11/407), pp. 29-30.

other words, the best way of studying the dependence of agriculture on the rest of the economy (and vice versa), beyond that we are already doing day by day in our Agriculture Division, jointly staffed with FAO, may be to undertake this study in connection with a future meeting of the Working Party on problems of development planning in agriculture.

Recommendations nos. 3 and 4 refer to studies on the extent to which net capital formation is being limited by excessive depreciation etc. and by non-essential expenditures (non-productive consumption or unnecessarily luxurious capital construction); no. 7, to an analysis of the "economic growth effects" of expenditure on health, education, and special training; no. 8, to investigation of suitable techniques for family budget studies and other types of sample surveys for estimating the income elasticity of demand for consumption goods (a field in which we have done a small amount of exploratory work only); and no. 12, also to techniques of demand projections and, in addition, to techniques of surveys of private investment intentions, for development planning purposes.

I do not wish in this place to say more about our work programme in the field of economic development, as it is affected by these recommendations, since other appropriate occasions for that will be afforded at the Commission Session. Obviously the views of the experts at this Working Party meeting should be given due weight in the final determination of the programme of work and priorities.

28 November 1955

REPORT OF THE WORKING PARTY ON ECONOMIC DEVELOPMENT AND PLANNING (FIRST MEETING) TO THE ECONOMIC COMMISSION FOR ASIA AND THE FAR EAST (TWELFTH SESSION)

Introduction

1. The first meeting of the Working Party on Economic Development and Planning in Asia and the Far East was held at the ECAFE Headquarters, Bangkok, Thailand, from 31 October to 11 November 1955, in accordance with the programme of work approved by the Commission at its 11th session.[2] A total of 16 meetings was held.

Attendance

2. The Working Party was attended by 51 representatives of 19 countries members of the Commission. Four observers from specialized agencies—the International Labour Organization, the Food and Agriculture Organization of the United Nations, the World Health Organization, and the International Civil Aviation Organization—, one observer from the United Nations Children's Fund, and six observers from non-governmental organizations —the International Chamber of Commerce and the World Federation of United Nations Associations—also attended.[3]

Documents

3. The working papers for discussion included four documents prepared by the ECAFE Secretariat, one by FAO, five by ILO, and 19 by participating governments. Twenty background documents were also made available by the Secretariat and governments for reference.[4]

Opening addresses

4. Dr P. S. Lokanathan, the Executive Secretary of the Economic Commission for Asia and the Far East, welcomed the participants of the Working Party. He mentioned that although most of the work of the Commission was connected with various aspects of economic development, this was the first working party dealing with general problems and techniques of planning and programming for economic development. In view of the immense possibilities of development in this region and of the need to organize properly the region's unused human and material resources, a number of countries had already embarked on a policy of planned development. Dr Lokanathan stressed that the exact solution to problems of planning had obviously to differ in different countries, and he invited the experts to examine the problems facing countries of the region, taking into account the characteristics and special circumstances of these countries. In view of the low level of saving in most countries, he invited the experts to examine not only the possibility of making development a "boot strap operation", through investment of increments to income with a view to raising productivity rapidly, but also the best methods of incorporating external assistance into the development programmes of countries of this region. In view of the general lack of statistics in this region, he invited the experts to examine the best technique of programming against such a background. He also emphasized the importance of deliberating on the problem of the most effective planning machinery and the priorities for the development of statistics necessary for planning.

5. Nai Sunthorn Hongladarom, Secretary-General, National Economic Council, read a message from His Excellency, the Prime Minister of Thailand. In welcoming the delegates to the meeting of the Working Party on Economic Development and Planning, the Prime Minister stressed the immensity of the problem as well as the great value of the opportunity for mutual consultation at the meeting. The means at the disposal of these countries for development are not adequate, and help must come from outside, as it has come in the past. In conclusion, the Prime Minister wished the meeting every success in its deliberations.

Vote of thanks

6. A vote of thanks for the Prime Minister's address was proposed by the representative of Ceylon and was carried by acclamation.

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1. United Nations document ECAFE/L.97.
2. *Annual Report of the Economic Commission for Asia and the Far East to the Economic and Social Council*, 19 February 1954—7 April 1955 (E/2712—E/CN.11/407), part V, project 02-01.
3. Appendix 1.
4. Appendix 2.

Election of the Chairman and vice-chairmen

7. Dr P. S. Lokanathan was elected Chairman and Mr Renoo Suvarnsit (Thailand) and Dr John H. G. Pierson (ECAFE Secretariat) were elected vice-chairmen.

Adoption of the Agenda

8. The provisional agenda[1] was adopted without amendment. It was also agreed that the discussion should follow the general outline of the annotated agenda as prepared by the Secretariat.[2]

Drafting Committee

9. The Working Party appointed a drafting committee, composed of Dr B. B. Das Gupta (Ceylon), Professor D. G. Karve (India), Dr Ali Budiardjo (Indonesia), Professor K. Ohkawa (Japan), Miss N. G. M. Watts (United Kingdom), and Professor Simon S. Kuznets (United States of America), to prepare the report. Professor Kuznets was elected Chairman of the Drafting Committee.

Concluding statements

10. After the adoption of the report, Professor Simon S. Kuznets (United States of America) proposed a vote of thanks to the Government of Thailand for its hospitable arrangements, and to the ECAFE Secretariat. In seconding the vote of thanks, Dr Ali Budiardjo (Indonesia), Professor D. G. Karve (India), and Mr C. Ramirez (Philippines) drew attention to the value of the Secretariat papers and other Secretariat assistance in the deliberations of the Working Party. Mr Renoo Suvarnsit (Thailand) thanked the delegates on behalf of the Government of Thailand.

Conclusions and Recommendations of the Working Party

Introduction

11. The Working Party's review of development programming and planning was greatly assisted by the papers prepared by the ECAFE Secretariat and by those contributed from several countries in the region and from international agencies. The discussion covered a large number of problems and reported on a variety of programming and planning practices in the countries in the region. The report that follows comments briefly on the broader issues and points out some specific questions that merit further exploration.

1. Appendix 3.
2. Appendix 4.

12. Wide as the field covered by the Working Party's deliberation was, only incidental reference was made to *implementation* of development programming. The aspect of implementation bearing upon mobilization of resources, particularly savings, has been discussed in past meetings under ECAFE auspices.[1] The other aspects cover a wide range of policies, the whole range of means at the disposal of society to channel the resources directly at the disposal of the government and to influence the flow and use of resources in the private sector.

13. The omission of this latter topic was deliberate and inevitable in view of the already extensive agenda that had to be covered. Yet the result was partly a limitation upon the direct practical importance of the conclusions reached, partly a difficulty in specification of some of the issues. Indeed, the meaning of "programming" or "planning", "priorities", and "targets" can be fully ascertained only in terms of the means which society is willing to apply in the use of powers by its government or other institutions. Programming or planning which counts heavily upon the performance of a large private sector, with government exercising only indirect influence through its budget, fiscal, and other policies, differs substantially from programming or planning where the government assumes direct control over all the facets of economic activity. It should not be assumed that over-all programming or planning of economic development is identical with over-all direct government control of a country's economy; that setting of broad priorities implies regulative enforcement rather than more flexible indirect policies; or that all targets necessarily mean commands.

14. The discussion by the Working Party was in terms of the experience of the countries of the ECAFE region, in most of which the private sector is and will remain large. The conclusions and recommendations summarized below, relating to determinants of economic growth, target setting and priorities, inter-industry relations, co-ordination of public and private sectors, external assistance, planning machinery, and even the required statistics, reflect this reference to economies in which both the public and the private sectors loom large.

15. The Working Party is of the opinion that the natural and logical next step in exploring problems of economic development in the region lies in a consideration of the means of implementation of development programmes and recommends that the next working

3. "Report of the First Working Party of Experts on Mobilization of Domistic Capital" (E/CN.11/I&T/63 24 November 1951); "Report of the Second Working Party" (E/CN.11/I&T/81, 27 September 1952); "Report of the Working Party on Financial Aspects of Economic Development Programmes in Asia and the Far East, first meeting" (E/CN.11/I&T/89, 12 September 1953), "Report of the Second Working Party" (E/CN.11/I&T/106, 16 November 1954).

party of experts be requested to deal with this topic. It would call for an examination of the various policies—budget, monetary and credit, investment, foreign exchange and trade, etc.—available both for directing resources under immediate control of the government and for influencing the movement of resources in the private sector; the co-ordination of such policies; and the specific kinds of data that are required for the administration of each specific group of policies. A thorough consideration of this broad topic, preferably preceded by circulation of working papers from the several countries of the region well in advance of the meeting, would provide a valuable supplement to and specification of many of the broader conclusions reached by the present Working Party.

16. Another direction in which further work by the Working Party in the field of development programming could be urged would concern problems of planning and implementation in separate major sectors of the economies in the ECAFE region. The discussion suggested the possible value of dealing specifically with problems of development planning and implementation in agriculture and with planning and implementation of industrial development, particularly in the private sector.

Determinants of economic growth

17. The rate of economic growth, *i.e.* of relative addition to total and per capita income, gauges a process whose moving forces are to be sought at many levels of a country's economic and social system. The pattern of growth in population numbers and the investment made in maintaining and improving health, education, and skills are clearly basic—since it is the human beings who are the carriers of and sharers in economic growth. The rate at which the stock of capital available for productive use within a country accumulates and the pattern of its allocation among industries producing either ultimate goods or additional tools are of obvious importance. The effectiveness in the use of labour, natural resources, and reproducible capital is largely set by the country's social and economic institutions which channel the movement of resources and affect the motivations of human beings on whose efforts economic growth depends. The levels of a country's technology, the adaptability of its domestic institutions to internal strains, and the degree of its dependence upon external trade affect the stability of its economic performance over time and thereby the extent to which *sustained* growth can be attained. This interplay of population, natural resources, capital, social and economic institutions, and ties to the rest of the world must be kept in mind in considering problems of programming and planning for a country's economic growth.

18. While the countries in the ECAFE region differ widely in the relation of population to natural resources, degree of industrialization, extent of capital accumulation, and other basic economic and social characteristics, some important similarities should be noted. In many, if not in all, the potential of population growth, associated with decreased death rates and still persisting high birth rates, is quite large. In most, the health, education, and skills of the population still require substantial investments, if they are to be brought to levels demanded for and commensurate with higher levels of economic productivity. In most, rates of net capital formation are low, and the rates of utilization of available resources are kept down by scarcity of complementary factors, particularly an inadequate amount of social and economic overhead capital and shortages of entrepreneurial talent. In many, political independence is a matter of recent years, and the social environment has yet to undergo the necessary transformation to provide favourable conditions for sustained economic growth. These considerations, increasingly recognized in the countries in the ECAFE region, are of importance; they indicate that the interplay of strictly economic and the more largely social determinants stressed above is all the more crucial for the ECAFE region. Where the political and social institutions, the pattern of population growth, and habits and training of the population still require major transformations, at least as much attention must be paid to these social determinants as to the strictly economic determinants such as capital investment, monetary and credit mechanisms, and the like.

19. It is within the broad context just suggested that questions relating to determinants of economic growth were discussed by the Working Party. Capital, while only one of the several productive factors, is of such recognized importance that special discussion of the possibilities of raising the rate of capital formation seemed appropriate to the Working Party.

20. The discussion stressed the possibility of substantial increases in net capital formation by introduction of techniques that, with little new capital, may raise productivity substantially (*e.g.* the Japanese technique of rice cultivation). Intensive search for such changes in production practices is an obvious desideratum. Beyond this point, a question arises as to the extent to which net capital formation in the countries in the ECAFE region (*a*) is limited by excessive cost of repairs, maintenance, and depreciation; (*b*) is restricted by non-

essential expenditures either on non-productive consumption or on unnecessarily luxurious capital construction, and (*c*) can be raised by the use of surplus labour. The question under (*a*) calls for further study which would explore whether lack of servicing, shortages of mechanical skill, or other factors result in the absorption of an excessively large proportion of the national product of the area in making up for heavy capital consumption. The question under (*b*) requires a study which would attempt to identify such non-essential expenditures, examine the transferability to more productive uses of resources that could be freed by curtailment of such expenditures, and provide some criteria for guidance of policy on this problem. The question under (*c*) is closely related to community development projects, the notable form of use of surplus labour compatible with the democratic basis required for sound economic growth. The evaluation of such projects, reported as having been initiated in India, could be of use in other countries in which such projects were attempted; and the results should be of much interest to other countries in the area. When such evaluation studies accumulate, the ECAFE should consider the advisability of calling a conference that would bring together the fruits of the experience and attempt to formulate some specific lines of guidance in this particular field.

21. Capital, however, is only one of the productive factors, and there is danger of over-stressing it and of excessive reliance on capital/output ratios. The capital/output ratio relates only a single factor to the product, which is one major objective in economic programming and planning but may not be the only one. The purely technical limitations of this ratio as a tool in analysis and programming stem from this concentration on a single productive factor and on a single end-result. Even accepting output as the only objective, the *average* ratio of capital to output on a countrywide scale is found to change fairly substantially over time, because of changing patterns of production and changing levels of efficiency of utilization of capital — associated with such other determinants as labour skills, managerial efficiency, etc. Changes in the *marginal* countrywide capital/output ratios will be all the more substantial. There are similar limitations, of even greater magnitude, attaching to the sectoral capital/product ratios; with the additional difficulty that these latter may differ or change over time not because of any differences or changes within the given sector but because of changes in other, complementary sectors. The consensus was to the effect that the countrywide capital/output ratios were hardly descriptive of a *production* relation; that they could be used, but only with some caution as to the large margins of error, to derive rough approximations either of additional capital formation required by some projected growth of output or of additional product expected from some projected rate of capital formation; and that they should be supplemented and supplanted by more discriminating tests of requirements and feasibility. The sectoral or project capital/output ratios were thought to be of some value as criteria for selection of production techniques and of location of given projects within an already given broad development programme, but that they had to be supplemented by detail on the types of capital in the numerator which would distinguish the particularly scarce capital items and by addition of information on the required stock of scarce factors other than capital (*e.g.* skilled labour).

22. The next group of questions relates to population, its numbers, health, education, and skills. That the human factor is basic is a truism which need not be repeated. But are there criteria by which a country's population policy could be guided, if economic growth be the objective? And to shift to a somewhat different level, are there any guides for programming expenditures on health, education, and special training? While the questions may seem too broad to permit effective exploration, the pressing character of the problems which they suggest cannot be denied. The Working Party recommends that (*a*) the problems of population growth and population policy in the ECAFE region, in their bearing on economic growth in the area, be reviewed afresh utilizing both demographic and economic data that have recently become available and (*b*) a competent analysis be undertaken of what might be called "economic growth effects" of expenditures on health, education, and special training—to ascertain whether any useful criteria can be set for allocating such expenditures within a broadly conceived development programme.

23. The last question is suggested by statements made by experts from most countries on shortages of public administrators and of entrepreneurs. The accelerated recruitment and training of public administrators necessary to overcome this shortage must, therefore, be coordinated with or included in any plan the effect of which is to expand the public sector. Similarly, technical assistance and the borrowing of technicians from abroad should accompany foreign financial aid and capital loans. In the case of entrepreneurs there is the additional capacity for taking risks and for initiative in a competitive environment. The Working Party assumed that an adequate supply of entrepreneurial talent is a matter partly of training in some elements of the required techniques, partly of learning by direct business experience, and partly of the state and society providing the conditions that would favour entrepreneurial initiative channeled

into socially productive uses. The Working Party limited the consideration here to the second of the three points noted. The question is as to the possibility of setting up arrangements to facilitate entry of would-be entrepreneurs into business, where they could be assisted in their progress toward a wider scope of productive performance. Such arrangements might include special credit, servicing, and guidance facilities, including favourable tax treatment for new enterprises, that would enrich the seed-bed of productive entrepreneurial talent in the country. The Working Party has no specific recommendations on this topic, not having had enough time to explore it. But the point seems worthy of exploration, and the experience and aid of member countries which have a long history of productive entrepreneurship should be drawn upon.

24. Apart from these special problems of better production techniques, population, entrepreneurship, and public administration—which have already been emphasized above—the Working Party also tried to evaluate the relative importance of the contribution made by other factors in the economic growth of the countries represented. In this discussion, it became apparent that the problem of avoiding economic instability plays a dominant part in a number of countries in the sense that their continued and sustained growth requires a greater measure of stability both in the external sense and in the sense of bringing development programmes into proper relation with total available resources. The great importance of resource surveys and improved knowledge of available natural resources was also stressed as a prerequisite of economic growth.

The choice of targets for development programmes and the determination of priorities

25. The general objective of economic policy shared by all countries in the ECAFE region is to increase output sufficiently to raise living standards within a relatively short time and simultaneously to lay the foundations for further expansion of their economies in the more distant future. To this end, the objective is to raise the rate of investment and to develop other activities conducive to economic expansion. How these general aims are translated into more precise objectives in each country depends essentially on the country's basic economic characteristics and problems, the nature of its social problems and policies, and the tools of economic analysis and the means of implementing economic policies that are at its disposal.

26. Thus, a country facing a serious problem of unemployment or rural over-population and under-employment may attach as much, or more, importance to the creation of new employment opportunities as to maximizing the growth of output and incomes. A country subject to serious instability in its export earnings may set as a subsidiary objective of its development programme an increase in import-saving production, which may well be justified even if it conflicts to some extent with the main objective. Social policies may also in some cases conflict with strictly economic objectives; it is possible that a policy aiming at a more equal distribution of incomes may limit the extent to which a country can safely plan to raise the level of investment (and therefore of domestic savings) as incomes rise; or a policy of extending health and education services may, beyond a certain point, reduce resources available for directly productive investment to an extent which implies a net loss of potential output.

27. In all countries of the ECAFE region, the objectives of development programmes go beyond the simple maximizing of the long-term rate of growth of output and income. In most countries—and especially in Japan, India, and Indonesia—either the creation of employment opportunities is a major objective, or the full-employment level of national income is considered as the major determinant of the development programme. In some other countries (*e.g.* Burma and Pakistan) a recent worsening of the foreign exchange position has led to a shift of emphasis from long-term rates of growth and aggregate targets towards the objective of improving the foreign exchange situation in the near future. The adoption of objectives of this kind is inevitable and reasonable, but, in pursuing these, naturally the country has to reconcile itself to a reduced rate of expansion of total income. In India and in some other countries of the region where raising the level of employment has recently become an increasingly important objective, efforts are being made to increase labour-intensive investment in village industry and in community development projects. The main dangers to guard against in development of the former kind are the possibilities of undue delay in taking advantage of new technologies and the building up of an industry which needs permanent protection.

28. Not all countries of the region translate the objectives of their economic development programmes into aggregative "targets" expressed in quantitative terms —for example, an increase in per capita consumption, or output, or employment, or investment over a specified period. Most countries, however, at least draw up programmes in quantitative terms for direct government investment expenditure. India established, as a background to the First Five-Year Plan, a long-term target (to double per capita income in 27 years). The setting

of long-term targets of this kind may be useful in indicating to the public the general magnitude of results that could be achieved by a real effort to increase the rate of economic development and in mobilizing public support for that effort. It may also have some value as a means of estimating very roughly the scale of investment required in those few sectors of production where the extension of capacity needs to be planned far ahead. In a number of countries long-term targets are in fact set for output in certain sectors such as power and transport. But forecasts of developments so far ahead are in general subject to very wide margins of error, and the setting of quantitative targets as practical guides for action by the government or by private industry seldom needs to deal with periods of more than five years.

29. Comprehensive development plans covering relatively short periods have in fact been drawn up by India (5 years) and by Japan (3 years and 6 years). There are clear advantages in drawing up programmes of this kind—which set targets within the framework of estimates of probable developments in other sectors of the economy during the period of the programme — provided that (*a*) the available statistical data are adequate to allow the framers of the programme to make estimates of developments in the private sector of the economy (*e.g.* the response of private consumption and savings to any change in disposable incomes) which are more than mere guesses and (*b*) the dependence of the economy on unforeseeable external forces (*e.g.* the world market for a small range of primary commodities) is not so great as to make any attempt at national income forecasting useless. If these conditions are fulfilled, the combination of "forecasts" and "targets" in comprehensive estimates of the future pattern of the national accounts should be of considerable value in revealing the existence of possible inconsistencies, which may then lead either to revision of the "targets" or to the adoption of new policies designed to change some of the "forecasts". The setting of development programmes within a framework of this kind is no less desirable when the main emphasis is on stimulating private initiative than when the main emphasis is on direct government activity.

30. Where a comprehensive system of national accounts has been developed, the setting of annual targets within longer period development programmes may be hardly distinguishable from the general process of statistical and economic analysis and the reaching of decisions on levels of government current and capital expenditure, taxation, credit policy, etc. which lies behind the formation of the annual government budget. But where the process of drawing up a budget cannot take place against this background and where the development programme is in fact essentially a programme for public investment expenditure—as is at present the case in a majority of the countries of the region—flexibility in framing the development programme becomes most desirable. The rate of expenditure can then be varied in response to unforeseen changes in foreign exchange incomes or the appearances of inflationary or deflationary tendencies in the internal economy. In general, the greater the susceptibility of the economy to external fluctuations and the greater the difficulty of producing realistic forecasts of developments in the private sector and the narrower the government's powers to influence in the short term the general level of activity—the greater will be the need for flexibility in the planning and implementation of public investment programmes.

31. Few countries proceed from the setting of aggregate targets for investment, output, etc. to the setting of detailed and comprehensive production targets for separate categories of final output. The statistical data required to estimate the pattern of final demand or the requirements of intermediate goods, capital goods, and stocks arising from a given level of output in a specific sector are not at present adequate for this purpose in most countries; neither is the scale of government investment expenditure usually such as to influence the pattern of final output decisively. The co-ordination of the rate of development of industry and agriculture and the planning of production (together with the availability of foreign exchange for imports) of certain basic commodities so as to avoid bottlenecks or excess production are, however, matters of considerable practical importance, and the development of statistical techniques adequate for this purpose deserves further attention. This is discussed in more detail in the section on inter-industry co-ordination.

32. But whether or not sector targets are set, the problem of determining development priorities exists in every country. The problem arises in two forms: (*a*) determining the pattern of the main investment programme within the limits of the resources expected to be available, *i.e.* the projects to be undertaken by public authorities or the criteria to be applied when considering requests from private investors for credit facilities or for foreign exchange to purchase capital equipment and (*b*) determining within each sector which projects should go into the main programme and which into a supplementary programme to be undertaken if resources available for investment should be greater than expected. It is the determination of priorities in the

sense described under (*a*) that presents serious difficulties and to which the Working Party has devoted most attention.

33. The determination of priorities in the sense discussed here will depend on a balancing of the costs and benefits of each project, or each sector of investment, in what can frequently be only qualitative terms.

34. The process can well begin with a consideration of the relative scarcity of the different resources available to a particular country. It is true of most countries of the ECAFE region that manpower is plentiful relative to the supply of domestic savings and external finance, skilled technicians and managers, and foreign exchange. The costs of various types of investment may therefore be assessed in part according to the demands each makes on particularly scarce factors. In addition, in countries where incomes and consumption standards are very low, the sacrifice involved in investment which takes a long time to produce additional goods for final consumption may also rank as a heavy cost. Moreover certain forms of investment (*e.g.* in education or health services) involve continuing operating costs which may constitute a budgetary burden that competes with future financial provision for directly productive investment.

35. A balancing of cost considerations would, in most countries of the region, suggest a high priority for labour-intensive projects, which should also tend in general to make relatively small demands on scarce skills and to yield quick returns in increased consumption.

36. In looking at the direct and indirect benefits of different types of investment, however, rather conflicting criteria seem to emerge. It is essential that the creation of a basis for further long-term expansion shall continue side by side with immediately productive investment. The development of basic facilities such as transport, power, education, etc. will be essential for this purpose and may itself stimulate increased investment in directly productive fields by private enterprise. But such projects will be slow yielding, though the long-term benefit, direct and indirect, may be higher than that received from more quick yielding investments.

37. A further consideration that needs to be borne in mind is the contribution which any project may make to the widening of specific bottlenecks that may be impeding expansion. Investment in technical training facilities may have a high priority on this account. Investment which increases the supply of, or replaces, scarce resources (*e.g.* import-saving investment) may also have strong claims.

38. The Working Party suggests in other sections of this report certain action which might usefully be taken by the countries to improve statistical techniques and to analyse the contribution which particular types of expenditure may make to economic expansion. As data and techniques of analysis are improved, it should be possible to narrow the area of judgment involved in determining priorities, even though fully quantitative comparisons of the direct and indirect costs and benefits of different projects will never be possible. The Working Party wishes to draw attention here to one further aspect of this problem which may well repay more consideration. There may be a danger in at least some countries of the region that industries may be established—either as a result of fortuitous protection given by a rationing of foreign exchange which keeps out competing imports or as a result of special privileges or special protection as compared with other domestic industries—which may prove in the long run to be uneconomic in the sense that they will never be able to exist without such protection. If such industries are established on a large scale, this may involve a continuous waste of resources in producing goods that could be obtained at less real cost either from economically more efficient domestic industries or from external sources; alternatively, awkward problems of adjustment will arise as the protection is withdrawn. Some further consideration might well be given to the possibility of devising institutional arrangements which provide safeguards against such developments. One possible safeguard might be arrangements for the progressive reduction of protection. Another, which has been proposed in connection with schemes for promoting village and small-scale industries under India's Second Five-Year Plan, might take the form of a phased programme of replacement of less efficient by more efficient production methods and of provision for the almost automatic saving of part of the earnings of those who benefit from the special assistance given by the state to labour-intensive industries. The capital funds thus accumulated can then be used to promote adaptation of production methods or the transfer of the producers concerned to more rewarding occupations.

39. Discussion in the Working Party revealed the general conviction that more consideration should be given to the development in the countries of the region of those statistical data and techniques likely to be most useful as tools for framing and carrying out an effective development programme. These will vary with the circumstances of different countries. But wherever public investment programmes, or government influence in other forms, have a significant effect on the pattern of development of the economy, some picture of the composition of demand and of its likely response to

rising incomes will be highly desirable as a means of securing a proper allocation of investment among sectors and projects. In several countries progress has already been made through family budget studies and other types of sample survey in providing material helpful in estimating the income-elasticity of demand for consumption goods. The Working Party considers that further study by the ECAFE Secretariat of the most suitable techniques to be used in this field in the countries of the ECAFE region would be useful.

Use of models and inter-industry co-ordination

40. Once the principal objectives have been decided upon, these objectives may be translated into a set of consistent and optimal "targets" in the quantitative sense. The effort involved in achieving these targets simultaneously or in defined stages and the repercussions of this effort on the rest of the economy have to be assessed carefully. The Working Party was of the opinion that in this task analytical models depicting the inter-relations between economic magnitudes—aggregative as well as sectoral—in each of the countries in the ECAFE region would be of some assistance. Admittedly, inadequate economic statistics in many of these countries render the fitting out of a theoretical framework exceedingly difficult. But in view of the steps being taken in these countries to improve the quality and quantity of available data, it was felt that reasonably useful models of the economy could be formulated in the not too distant future.

41. The general view of the Working Party was that the question of models could be approached in two stages. It would in the first instance be necessary to envisage a framework with reference to which the mutual consistency of the over-all targets of income, consumption, capital formation, etc. could be judged. For this purpose, aggregative models that express the principal economic variables in terms of a small number of parameters could be used. But such aggregative models would be of little help in judging the most favourable allocation of available or expected resources among the various sectors of the economy. From this point of view, a frame that clarified the inter-industry or inter-sector relationships would be of some advantage.

42. In the present state of statistical knowledge in the ECAFE countries, it would be virtually impossible for many of them to formulate a detailed model to serve both the purposes mentioned above. They will have to depend for the most part on simpler devices such as "resource budgeting" and commodity balances in programming and planning. As is widely recognized, most countries in this region have a relative surplus of manpower, while their savings and foreign exchange resources are limited. In order to maximize their rates of development, they have to plan in such a way that the former is utilized to the utmost extent and the latter are distributed in the most favourable manner. The particular forms in which these objectives are sought to be attained depend obviously on the special characteristics of the economy and the planned objectives. But in all cases, it would be necessary to ensure that the supply of and demand for these resources are in balance. Budgets may be drawn up for manpower, internal and external savings available to the community, financial resources, etc., and they can then be viewed together to assess approximately the adjustments necessary for reaching the aggregative targets. In the USSR, for instance, considerable use is made of "resource budgeting" for working out a balanced plan.

43. The general resource budgets would not however be adequate for ensuring that the supply and demand for particular commodities are in balance. For this purpose, fairly detailed budgets or "balances" will have to be prepared in respect of individual commodities, especially commodities of strategic importance to development, such as coal, steel, power, construction materials, food, etc. Whatever the form of planning adopted, intelligent allocation of materials will require the formulation of commodity balances. And in the ECAFE countries, where the data for drawing up sufficiently articulate resource budgets may not be available, commodity balances assume very great importance.

44. Efforts should therefore be made in the ECAFE countries to work out such balances for all commodities of major importance. Instances in point are steel, fuel, electric power, and skilled labour. Obviously, the larger the number of commodities for which such budgets can be prepared, the better the prospects of integration of the development plans of different industries. Such balances have been used extensively in the USSR for formulation of the country's five-year plans, in the United Kingdom during the war years, as well as in other countries.

45. In drawing up the commodity balances, the calculation of "standard unit requirements" of important commodities in different industries is likely to be of considerable use. This technique has been used extensively in Japan. On this basis, available or expected supplies could be matched with the demands likely to be generated during successive phases of the development programme or plan. The unit requirements could from time to time be adjusted in accordance with known or

foreseeable changes in production techniques. The method of commodity balances would thus be capable of being used in a flexible manner. The Working Party therefore recommends that immediate attention be given to the question of identifying the bottle-neck commodities in each of the ECAFE countries and formulating for each such commodity a balanced budget of supplies and demands.

46. Special consideration was given by the Working Party to the budgeting of foreign exchange in view of the importance of the foreign trade sector to several of the ECAFE countries. Countries like Ceylon, Burma, and Indonesia were particularly handicapped in planning and programming by the fluctuations in their foreign exchange earnings. These fluctuations had repercussions on all sectors of the economy and made the task of resource budgeting over sufficiently long periods extremely difficult. Furthermore, they introduced an element of instability into the economy and warranted a certain amount of concentration on projects that helped isolate the internal levels of consumption and investment from sudden shocks from abroad. As a corollary to this, it was suggested that in the process of development in both the industrial and agricultural sectors, a measure of diversification of production was necessary. This had to be taken into account in formulating the "uses" side of resource budgets. The Working Party also recognized the dependence, at least in the initial stages, of the ECAFE countries on the more advanced economies outside this region for capital equipment, technical knowledge, etc. In order to obtain these essentials for development, they will have to foster industries which enlarge their foreign exchange earnings on the one hand and reduce their import requirements on the other. What priority should be given to these objectives would be influenced by the resources that will have to be devoted to this purpose. The Working Party took the view that while the ECAFE countries could to some extent aim at such diversification, it would be impossible for them to pay for all the imports of capital equipment etc. needed for the development programme through exports from current production. A substantial part of such imports from abroad will have to be financed through grants and loans obtained abroad. The Working Party's views and recommendations in regard to external assistance are set out in a later section.

47. As regards the use of input-output analysis for elucidating inter-industry relationships and for facilitating allocation of bottleneck commodities, the Working Party was of the view that it would be virtually impossible for many of the ECAFE countries to have any detailed input-output tables, without investing much time and energy in the collection and processing of the required data. Whether such effort is warranted by the likely use to which input-output analysis can be put in planning the allocation of resources is questionable. Among the ECAFE countries, Japan and India have sought to construct input-output tables covering a number of industries. But even in Japan, where for some recent years such tables have been formulated, they have not yet been used much for planning purposes. One cardinal reason for this is that the input-output matrix is not a sufficiently flexible apparatus for use in economies which depend on the price mechanism to a greater or less degree for allocation of resources and which resort to planning with a view to altering significantly the structure and techniques of production in the economy. However, even for these countries, it may be possible to formulate a rudimentary matrix for a group of existing or projected industries. Such a partial input-output table would, in the initial stages, amount to nothing more than estimating roughly the net demands these industries are likely to make on the rest of the economy and the net supplies they are likely to offer to it under existing or assumed values of the technical coefficients. These could be extended and improved upon as new industries are started or as more information becomes available. Provided the inherent limitations of input-output analysis are borne in mind, it is important that efforts are made to develop and master such techniques in countries in the ECAFE region, albeit gradually.

48. In the ECAFE countries generally, the predominance of the agricultural sector poses special questions in regard to the development and use of inter-industry relationship tables and commodity balances. The distinction between the "household" and the "firm" in the agricultural sector is not clear-cut, and this complicates the classification of "inputs" and "final consumption" in the manner possible in respect of manufacturing industries. Apart from this technical difficulty, the Working Party considered it a matter of crucial importance for countries in the ECAFE region to have a more illuminating framework than has been hitherto possible for depicting the magnitude and terms of trade between the agricultural and industrial (or non-agricultural) sector. This would be necessary for arriving at conclusions regarding the relative importance of raising agricultural productivity in any scheme of development.

49. The Working Party agreed that significant economic progress would not be possible without an increase in productive efficiency in the agricultural sector. A larger agricultural output, contributing to an increase in demand for products for industry in the rural sector,

could promote investment in and expansion of the industrial sector also. Even from the relatively short-term aspect of preventing inflationary pressures during the "gestation" period of investment in basic industries, raising agricultural productivity was of strategic importance. But with the great impatience and enthusiasm for rapid development in these countries, it may not be possible for them to follow the old pattern of development with a rapid expansion of demand for consumer goods inducing industrialization in general. For the predominantly agricultural countries, the smallness of the industrial sector itself created a difficulty, inasmuch as it restricted the non-agricultural market for the agricultural goods, and the opportunities for a shifting of surplus labour so essential for raising productivity per labour unit. There is little question that over a period, a shift in the occupational distribution in favour of industry would not only be desirable but necessary. Consequently, it would not be possible for the ECAFE countries to wait upon what may be described as induced industrialization. Deliberate attempts to divert at least the additions to labour supply to industrial employment would be required even for raising agricultural productivity. The implications of such a policy have been worked out for Japan and to some extent in the case of India. This would doubtless include not only larger investment in basic industries and services but probably many others as well. There would be phases of a more rapid growth of industries than of agriculture, but, if the direction of investment in the industrial sector is so arranged as to prevent a continued excess supply of industrial products or excess demand for agricultural products, serious imbalance in the economy may be obviated. It is for facilitating the working out of safeguards of this sort that the Working Party considered a clearer enunciation of the inter-industry relationships in terms of the broad agricultural and industrial sectors essential. While there has been substantial improvement in the information on the industrial sector in the ECAFE countries, very little is known about the agricultural sector and its dependence on the rest of the economy. This is a field in which further studies would be of immediate benefit from several angles.

Co-ordination between public and private sectors

50. The distribution of investment in any country between the public and the private sectors is not determined by purely economic considerations. Historical, political, and social factors also play a part in it. From the economic angle, the basic consideration is whether, after balancing costs and returns or benefits, the net long-term advantage to society will be greater from state ownership and operation than from private ownership and operation. Certain fields of investment like the social overheads will of course not be taken up at all by the private sector since it must have an adequate profit incentive. These must be undertaken by the state. Extension to other fields may be justified if it is felt that undesirable monopolies or concentrations of economic power will result if they are left to private hands. It may also be justified where private industry cannot raise sufficient capital funds for investment in necessary lines of development, although in such cases the utilization of private initiative may be secured by providing or guaranteeing capital.

51. Since the basic factors which determine the allocation of functions between the two sectors are different in different countries, the actual boundaries of the sectors are also different. In India, where the objective of policy is the establishment of a socialistic pattern of society and a welfare state, communications, railways, and air transport, as well as defence industries and a few key industries, are at present government monopolies. One of the objectives proposed by the Second Five-Year Plan, however, is to expand the public sector. At the same time certain fields of investment have been clearly marked for development by private enterprise—especially small-scale and cottage industries. In Japan, most economic activities are carried on by private enterprise.

52. Recent trends have also been different in different countries. In Burma, for instance, new development expenditure is largely concentrated in the public sector; while in Ceylon, although the size of government investment has been growing, government has decided to withdraw from certain commercial projects and hand them over to the private sector in stages. In Korea, because of the special conditions, government had to start many projects on its own, but it now intends to hand over many of these to private enterprise. In some other countries of the region also, as for example in the Republic of China, an attempt is being made to transfer some of the public enterprises to the private sector, utilizing the proceeds as additional financial resources for public investment. In India, the bulk of new investment, if "capital-like" expenditure is included, is planned to be undertaken by the state.

53. A very significant development in the direction of combining the resources of capital and organization of the two sectors is the formation of composite corporations. In India, for instance, in several fields of finance and industry private and public capital and management have been combined in mixed companies. The working

of those companies should be watched with interest, as it may indicate a probable line of development in this area.

54. Given the existing boundaries between the public and private sectors, the Working Party's task was to consider how co-ordination in development planning and programming between the two could be best achieved. Such co-ordination is essential for attaining the national targets, preventing competition for resources between the two sectors, preventing bottlenecks, and harmonizing the demand and supply of consumer and producer goods in the economy. The Working Party would, however, like to emphasize at this stage that wherever the boundary between the two spheres of investment may be drawn, it should be clearly stated and also kept stable as far as possible. Too frequent changes may shake the confidence of the private sector and reduce the volume of investment undertaken by it.

55. Given the aggregate targets, the problem of co-ordination of the levels of activity between the public and the private sectors is largely the problem of making correct projections of the community's future demand for goods and services which the planned rise in national income will generate. Given the aggregate target, the levels and patterns of investment in the two sectors should be drawn up in the light of these demand projections. The rise in incomes will cause a rise in the demand for consumption goods which in turn will increase the demand for intermediate and capital goods. The sectoral investment targets or forecasts should agree with the investment figures derived from demand projections. Otherwise the sectoral targets will be inconsistent with the over-all aggregate targets, and either the former or the latter will have to be revised. Alternatively, the free decisions of individuals in regard to consumption and investment will have to be influenced by physical or financial controls of one kind or another to achieve the desired consistency of sectoral and aggregate targets.

56. Demand projection is an extremely difficult task. Past or current surveys of expenditures, however complete, will not be by themselves an accurate guide because account will have to be taken of likely changes in the distribution of income, changes in taste, changes in prices, changes in technology, and changes in complementary and competitive goods (both domestic and foreign).

57. In the ECAFE countries, not much use has so far been made of demand projections for the purpose of development planning and programming nor of forecasts of private investment. For the most part, the private sector's investment targets or forecasts have been drawn up either more or less arbitrarily or on the basis of consultations with the private investors themselves. In framing the targets for several industries in its Second Five-Year Plan, India has utilized the data on demand supplied by its national sample surveys. The Working Party would like to emphasize the need for wider use of demand projections and of surveys of private investment intentions for development planning and suggest that the ECAFE Secretariat may well examine the techniques of such projections and surveys that will be specially appropriate for the countries of the region.

58. As said before, the volume and pattern of private investment can be brought into line with the national and the public sector plans by influencing the private sector's consumption and investment behaviour. All countries possess a variety of instruments for this purpose. But a distinction may well be made between measures and policies which will *induce* the private sector to follow the desired goal and objectives, that is to say create the necessary climate, and measures and policies which are strictly *regulatory* and which will leave very little freedom of action to the private sector. It will be desirable, as far as possible, to follow the former course provided the same results are obtained—on this matter the review of implementation policies suggested in the introduction as the topic for the next working party of experts should provide valuable conclusions.

Incorporation of external assistance in the development programme

59. For most of the ECAFE countries aiming at rapid development, external assistance—both financial and technical—is likely to be needed for a considerable length of time. The receipt of technical assistance is important, in view of the shortage of trained specialists of particular types in individual countries. Similarly, an inflow of external capital is needed in order to increase the magnitude and pace of economic growth.

60. In view of the need for external assistance, questions relating to the magnitude, form, and continuity of such assistance figure importantly in the formulation of development programmes within the ECAFE region.

61. External assistance extended to the countries of the region should meet the test of yielding maximum possible benefit by way of augmenting productivity in the recipient country. It is from this standpoint that we should examine the characteristics of external assistance with regard to (*a*) form, (*b*) continuity, and (*c*) timing.

62. External assistance takes the form of both technical assistance and financial assistance. Technical assistance is needed to provide guidance and knowledge in the incorporation within a development programme both of relatively scarce domestic resources and of such external resources as prove to be available. Technical assistance alone, however, is not enough, if development is to be rapid. The essential fact is that the supply of domestic capital now existing in most ECAFE countries, or potentially realizable under existing institutional arrangements, is inadequate to allow more than moderate economic growth. For this reason financial assistance needs to be obtained and incorporated into programmes of domestic development.

63. The Working Party devoted its attention especially to financial assistance in the form of either grants or loans provided by governments or international agencies. Loans can be considered as financial assistance only if the future repayments (including interest) are significantly smaller than the increase in the country's productivity generated by the loan.

64. In order to contribute to the fullest extent to the country's productivity, external assistance must possess an element of continuity. Developmental programming, either on an over-all or on a sectoral basis, will prove difficult if external assistance movements are relatively erratic.

65. In respect to timing, it is equally apparent that once the development programme has been systematically worked out and there is reasonable assurance as to the availability of external assistance (in aggregate terms), the successful prosecution of the programme requires certainty in the receipt of the expected assistance at the time-period (previously fixed) for the specified segments of the programme.

66. To date the most common practice in international financial assistance has been to tie loans to specific projects. The preference of lending countries for this approach is understandable since ability to cite specific projects helps to secure public support for assistance programmes and helps in the creation of psychological ties between the contributing and receiving countries. This practice is also followed, though with increasing flexibility, by specialized lending agencies. It must be recognized however that this is not the only possible approach. The Working Party considered the possibility of financial assistance incorporated in a general development programme. A desirable approach would be to tie financial assistance to specific projects which are integrated parts of an over-all programme. Receiving countries however may not have proper institutional arrangements or an established over-all programme, while certain specific projects need speedy implementation.

67. The Working Party discussed, among other forms of economic assistance, the use of consumer goods and raw materials for economic development. While it was stressed that, in giving aid in these forms, the greatest care must be taken to ensure that their use is in excess of normal consumption and that their disposal does not disturb normal international trade relationships, it was considered that in certain circumstances such aid can assist in raising living standards and the rate of capital development.

68. The established technique in the region of setting up counterpart funds—being the requirement that a receiving country deposit local currency to the extent of all or most of the value of external assistance—can be of broad potential use in the economic development process. It automatically makes available a block of domestic currency at the disposal of the co-operating governments, and this can be used for redirecting resources either to help channel the external assistance into effective use or for other purposes.

69. In timing the expenditure of the counterpart funds the same care must of course be exercised in regard to inflationary pressures as in any other government expenditure.

70. Consultation between assisting and assisted countries is valuable in order to obviate disagreement as to the manner of utilization of external assistance. This is important especially from the standpoint of achievement of maximum advantage from given resources available now and in the future.

71. Some recipient countries may face a special problem in the administration of such assistance. One procedure, successfully practised by some ECAFE countries, is to entrust domestic administration of external assistance to an aid agency which is closely tied for working purposes with the national development (or planning) agency.

Planning machinery

72. With the assumption by the State of new functions regarding economic development, the machinery of public administration usually undergoes changes, the nature and extent of which depend on the content of the developmental programme for which government makes itself directly responsible. While in some countries planning is limited to establishing priorities in items of developmental public expenditure, and in a few others

planning implies an almost complete control over the design and direction of the process of economic development, in most countries the prevailing pattern is that of adapting existing administrative institutions and improvising new ones to meet the steadily growing demands of economic policy.

73. When the planning function develops into an attempt to formulate an over-all plan of investment, employment, and production and to raise the necessary resources for the implementation of such a plan, as it has to a great extent done in India, the appropriate machinery would take the form of almost a supplementary cabinet. Acting outside the normal machinery of government, but still having the highest status among governmental organizations, this body could effectively participate in policy making as well as assume the function of formulating a national plan. The membership of this body would be partly independent of the Cabinet and composed of persons having mature experience of administration, industry, etc. In most countries of the region, planning is considered of sufficient importance to merit the appointment of the Prime Minister as the head of the highest planning authority. But so long as planning functions relate principally to co-ordination of departmental activities and programmes, the planning body itself tends to be an inter-ministerial committee, often strengthened by the addition to its membership of some other high officials such as the governor of the central bank. The problem of securing contact with the policy making authority is almost automatically solved in this organization, as the planning authority is to all intents and purposes a sub-committee of the Cabinet presided over by the Prime Minister.

74. Both these types are, however, in the course of evolution in keeping with the evolution of planning policy. But in both of them, operational problems arise which are of great significance to the success of development. A very important problem in this connection is that of securing access to data bearing on the formulation of a programme and its evaluation with a view to continued adjustments. In India, the problem is simplified inasmuch as the Planning Commission is entitled to receive as a matter of course all the information which it may need from normal sources in the central as well as state governments. In a few cases, where the Commission is in need of additional information, it has followed the practice of sanctioning special inquiries.

75. In some countries having an inter-ministerial board as the chief planning body, the setting up of a suitable agency to gather the necessary information appears to be a somewhat difficult task. Even here, the high standing of the organization secures access to existing sources. While it is true that the building up of statistical services has yet to make adequate progress in several countries, wherever such services exist they are being brought into the closest harmony with the planning authority. In India, the Central Statistical Organization, which is attached to the Cabinet Secretariat, works in close co-operation with the Planning Commission. In most countries, a planning bias is being given to statistical and information services at all stages. Most public departments and organizations collect statistical information and other data in the normal course of their functioning. The forms of such information may be appropriately revised so as to secure more effectively the purposes of planning. The agencies of research in universities and institutes could also be made to participate more usefully in the effort to obtain adequate and reliable data on the formulation and effects of development planning. The variety of consultative committees and boards to which experts and leaders from almost all branches of knowledge are usually appointed would also ensure that no source of significant knowledge is left out of the calculation of the planning authority.

76. Shifts in economic conditions, internal and external, occasionally cause a major change in the conditions of planning. Changes may also occur in state policy due to other reasons. In view of this contingency, the question often arises as to whether the planning agency should have alternative plans ready to meet likely changes in conditions and policies. The almost unanimous answer to this question in this area has been to incorporate into a single plan the prescribed trends in policy, but to leave sufficient elasticity in its formulation to meet likely changes in the economic situation. Considering the paucity of resources and also considering the importance of having a sustained policy underlying a plan, this preference for one steady yet progressive and elastic plan seems to be fully justified.

77. An integrated relationship between the planning body and the operational departments of government is equally essential. Such need is, of course, obvious in the case of the Finance Ministry. Where, as in India and Burma, the Finance Minister is a member of the planning body, such a smooth working relationship is easily established. But in all cases, an attempt is made to draw as many ministers as possible into the functioning of the planning body. On the officer level, frequent conferences and exchange of information are being encouraged in all countries. Anything that brings in the departments at the earlier stages of the planning process is a point in favour of ensuring their full co-operation at subsequent stages. As the role of the planning agency

is more clearly appreciated, a normal working relationship will be easily established between it and the other important ministries and departments of government.

78. Nowhere is the need for such an integration of counsel and operation more important than in regard to vital economic functions, *e.g.* monetary and credit policy, foreign exchange, prices and wages, regulation of industry, etc. While each one of these is important in itself, their dependence and influence on plans of economic development are even more important. Full membership of the planning board would be difficult for ministers and officers who have time-consuming responsibilities in their own departments. A system of frequent consultations and full interchange of views appears to have the best promise of success in this respect.

79. In all the countries of this area the importance of the private sector is rated very high, and, in fact, without the full and active co-operation of the private sector, successful planning will at this stage be impossible. A necessary preliminary to the establishment of a co-operative relationship between the two sectors is the education of both, officials as well as businessmen, in the nature and advantages of the plan. Normal methods of consultation and participation, *e.g.* industrial panels, consultative committees, joint boards, etc., may be trusted to provide the channels of fruitful co-operation. If the planning policy is accepted as representing the best judgement of the community, no insuperable difficulty in the way of ensuring such co-operation need be anticipated. It is, however, essential to keep the membership of the planning authority free from allegiance to sectional interests. Hence, the grant of representation on that body to any particular group in society must be considered inappropriate. It would, however, be desirable to carry on the policy, followed in some instances, of appointing some persons with experience of private industry as members of planning boards.

80. There are many significant parts of the national economy which fall outside of government. For instance, there are the large number of men with very limited resources, in agriculture, industry, commerce, and other occupations, on whose progressive contribution to the production effort depends a large portion of the success of a plan. In most countries a systematic effort is being made to spread among these people knowledge about the plan and to induce them to participate actively in it. Any regular system of communication and consultation which could be established for this large sector would widen the foundation of planned industrial development.

81. In the machinery to be set up for a more effective pursuit of plans of economic development two types of institutions merit special consideration from member states as well as from the United Nations organizations concerned. To be effective the planning process must draw on the services of technicians, economists, and administrators. Normally, these classes, while adept in their own field, have insufficient orientation regarding either the implications of planned development or the characteristic contribution that each class of experts has to make to the success of the common process. A definite need exists to provide for appropriate training of at least the high level officers in planning organizations so as to make them more efficient participants in planning team-work.

82. Equally urgent and important is the need to develop, on a more systematic basis than seems to have been attempted hitherto, an evaluating organization as an accompaniment to planning and as a necessary part of planning machinery. Both for method and direction, the findings of such an organization based on data normally supplied by other parts of the planning machinery ought to be very significant. Much of the constant watchfulness which a private firm normally exercises, but which tends to be hampered by departmental routines in social planning, can be institutionally supplied through an evaluation organization. At least on a pilot basis it would be worth while initiating evaluatory section in the planning authority and wherever possible, in the several planning organizations.

Statistics required for planning

83. In considering the data necessary for programming economic development, the Working Party drew a distinction among three types of data: first, data reflecting the structure and trends in the economy as a whole in its several aspects; secondly, data relating to certain scarce or strategic factors or chosen sectors; and finally, data relating to the actual policy measures taken and their impact.

84. The Working Party felt that basic data, such as data on population and employment, output, trade, etc., were of the utmost importance for any economy. Improvement of such data was, therefore, a first priority. For planning, however, such broad data are not sufficient, and it is important to secure direct data on the strategic factors in the economy. The Working Party felt that though data in relation to these could best emanate from a slow improvement of the basic statistics, the available data could be supplemented by special surveys which could be useful for planning purposes, as is, for instance,

done in India through the institution of the multi-purpose National Sample Survey. The sample survey method is especially useful in gathering specific statistics for special purposes.

85. The Working Party felt that since planning in most countries of this region is limited for the present to a government investment programme, it would be particularly useful to analyse the impact of the budgetary operations of the government. In this connection, the Working Party endorsed the recommendations of the Workshop on Problems of Budget Reclassification for analysing the impact of government's budgetary operations on the economy.[1]

86. Inter-industry co-ordination calls for comprehensive statistical data on the requirements and supply of intermediate goods for the production plans envisaged including materials, power, and transportation facilities. However, in most countries in the ECAFE region, such comprehensive data are not available. In this case, it is desirable to gather data, such as standard unit requirements of materials, to facilitate commodity budgeting for the more important and strategic industries. For instance, a steel budget may be drawn up by projecting the output and net import of steel and by estimating the demand for steel from the various sectors of the economy. Data on the material requirements for a new process of production may be to some extent available from the data in other countries with certain modifications. Thus, by depending upon these data, some strategic judgements may be drawn on the inter-industry co-ordination of at least the more strategic sectors.

87. For securing inter-industry co-ordination, the construction of national input-output tables is a technique recently adopted in some advanced countries. Although a few of the ECAFE countries have constructed input-output tables, these have, however, not been directly used for securing inter-industry co-ordination in their development programmes. In countries where deficits and surpluses may be adjusted through international trade, comprehensive inter-industry co-ordination, while still useful, is not indispensable, and, correspondingly, statistical requirements for inter-industry data need not be so exacting.

88. In programming development, the problem of keeping a close watch on actual implementation is extremely important, and the Working Party felt that it was essential for countries to develop suitable indicators to show not only whether and to what extent plans are being fulfilled, but also for assessing the impact on the economy. To this end, the Working Party felt that indicators suited to the circumstances of each country were of the utmost importance. Data on prices, for instance, could be of value to most countries in this connection, for indicating the disparity between targets and performance. It was felt, however, that in using price indicators, care must be taken to differentiate between movements generated abroad and those arising within the economy.

89. The Working Party gave special consideration to the problem of accuracy of data. It was agreed that for planning it was necessary to have reliable data and an idea of the likely range of error in these data. In fact, it was felt that reliance on inaccurate data could be most dangerous. Opinion was, however, divided as to the extent to which costly effort should be directed to minimizing errors in data. In respect of non-sampling errors in data, judgement and experience were the only possible criteria for evaluating the usefulness of data for development purposes. The Working Party felt that the process of improvement of data could be facilitated by the actual test of analysis, and felt, therefore, that as far as resources of finance and trained personnel would permit, every country of the ECAFE region ought to have a small research section in its central statistical agency. Such a research section would test various data for accuracy, relevance, and consistency, for example, by checking production and employment data, various credit and debit items in the balance of payments, etc. The Working Party also felt in this connexion that release of all available data, with notes on their scope and the method of their collection and the likely margin of error, would be useful in that these data could then become subject to tests of analysis by research workers at large.

90. In the matter of collection of new data, the Working Party considered that the special characteristics of the ECAFE region should always be borne in mind. Some of the usual concepts like employment or under-employment are difficult to fit into the social and economic pattern of the countries of this region. The presence of a large non-monetized sector and the nature of household production, where the boundaries between production, consumption, and investment are thinly drawn, make it necessary to modify the available economic and statistical concepts in their application to countries of the ECAFE region.

91. Improvement of statistics, particularly with respect to availability, has occurred in most ECAFE countries in the last few years. Statistical series in various fields

1. "Report of the Workshop on Problems of Budget Reclassification in the ECAFE Region" (ECAFE/L.95, 21 September 1955).

have been built up and their coverage and accuracy improved. However, there is still urgent need for further improvement, especially in respect of quality. One of the obstacles to the improvement of statistics in this region is the shortage of trained personnel. The Working Party considered that the ECAFE Secretariat could play a useful role in bringing about improvement of statistics in the member countries. One way of doing this would be by making the services of experts available to these countries.

Summary of Recommendations on Studies and Other Similar Work

1. The next Working Party should be requested to deal with the means of implementation of development programmes: to examine the various available policies—budget, monetary and credit, investment, foreign exchange, and trade, etc. (para 15)

2. Another direction in which the Working Party might do further work would concern problems of planning and implementation in separate major sectors of the economies in the ECAFE region such as (*a*) agricultural development or (*b*) industrial development, particularly in the private sector. (para 16)

3. Studies should be made of the extent to which net capital formation in ECAFE countries is limited by excessive cost of repairs, maintenance, and depreciation. (para 20)

4. Studies should be made with regard to the limitation of net capital formation by non-essential expenditure either on non-productive consumption or on unnecessarily luxurious capital construction. (para 20)

5. When evaluation studies accumulate, ECAFE should consider calling a conference to bring together the fruits of experience of countries in the use of community development projects for utilizing surplus labour for capital formation. (para 20)

6. Problems of population growth and policy in the ECAFE region, in their bearing on economic growth, should be reviewed afresh. (para 22)

7. An analysis should be undertaken of the "economic growth effects" of expenditure on health, education, and special training. (para 22)

8. Study may usefully be made by the ECAFE Secretariat of the most suitable techniques to be used in family budget studies and other types of sample surveys for estimating the income elasticity of demand for consumption goods in the ECAFE region. (para 39)

9. Immediate attention should be given to the question of identifying the bottleneck commodities in each of the ECAFE countries and formulating for each such commodity a balanced budget of supplies and demands. (para 45)

10. Efforts should be made, although gradually, to develop and master the techniques of input-output analysis in countries in the ECAFE region. (para 47)

11. Further studies of the agricultural sector and its dependence on the rest of the economy would be of immediate benefit. (para 49)

12. ECAFE may well examine the techniques of demand projections, and of surveys of private investment intentions, for development planning purposes. (para 57)

13. A need exists to provide for appropriate training of at least high-level officials in planning organizations so as to make them more efficient participants in planning team-work. (para 81)

14. The ECAFE Secretariat could play a useful role in bringing about improvement of statistics in member countries, as for instance by making the services of experts available to these countries. (para 91)

Appendix 1

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International Civil Aviation Organization (ICAO)	Mr Hans Huggler, Chief, ICAO Technical Assistance Mission to Thailand, c/o Ministry of Communications, Bangkok

United Nations Children's Fund (UNICEF)

Mr Brian Jones, Chief of Operations and Programming Division, Asian Regional Office, Bangkok, Thailand

Non-governmental organizations

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	Luang Yuktasevi, c/o Thai National Committee of the ICC, Bangkok
	Mr Limin Lamsam, General Manager, Lamsam Import Company, Bangkok
	Mr S. Sakuma, Member of the Staff of the ICC Japanese National Committee, Tokyo
	Mr S. Ushiki, c/o The Bank of Tokyo, Bangkok
World Federation of United Nations Association (WFUNA)	Phya Donavanit Montri, Chairman, Port Authority of Thailand, and Commissioner, Thailand State Railways, Bangkok

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APPENDIX 2

LIST OF DOCUMENTS

A. *Working papers*

	Symbol
Provisional agenda	ECAFE/DPWP.1/1
Problems and techniques of economic development planning and programming with special reference to ECAFE countries	ECAFE/DPWP.1/2 and Corr.1
Statistics required for planning in the ECAFE region	ECAFE/DPWP.1/3
Manpower information (ILO)	DPWP.1/1
Note on the functions and nature of productivity programmes (ILO)	DPWP.1/2
Utilization of surplus labour in the ECAFE region (ILO)	DPWP.1/3
Rate of growth of the Japanese economy	DPWP.1/4
The growth-rate of economy and the capital coefficient in the tentative Six-Year Economic Plan (Japan)	DPWP.1/5
Recent progress of inter-industry relation study in Japan	DPWP.1/6
Outline of the methodology applied to the tentative Six-Year Economic Plan (Japan)	DPWP.1/7
Labour force trends foreseen on the basis of population trends and other relevant factors (ILO)	DPWP.1/8
Nature and magnitude of the training programmes and other aids to greater labour mobility required to overcome current and foreseen shortages of specific types of skills (ILO)	DPWP.1/9
Brief survey of the first phase of industrial equipment (Viet-Nam)	DPWP.1/10
Co-ordinated agricultural development in the Far East as a means of conserving foreign exchange (FAO)	DPWP.1/11
Note on the capital output ratio (Indonesia)	DPWP.1/12
Annotated agenda (ECAFE)	DPWP.1/13
Technique of programming in India's First Five-Year Plan (ECAFE)	DPWP.1/14
Standard unit requirements of factors of production as a technique of resource budgeting (with special reference to Japan) (ECAFE)	DPWP.1/15
Annotated guide to working papers	DPWP.1/16 and Add.1
Development planning in the Philippines	DPWP.1/17
Criteria for the allocation of foreign exchange for development (Philippines)	DPWP.1/18
Inter-industry relations (input-output analysis) in Japan	DPWP.1/19
Some considerations on the priorities of industrial development (China)	DPWP.1/20
Allocation of scarce resources (China)	DPWP.1/21
Availability of essential statistics in under-developed countries with special reference to Pakistan	DPWP.1/22
The transfer of public enterprises to private ownership in Taiwan (China)	DPWP.1/23
Utilization of US economic aid by the Chinese Government in economic development	DPWP.1/24
The place of the Economic Stabilization Board as a planning organization in the Government of China	DPWP.1/25

Recent developments on the basic statistical work of the Chinese Government DPWP.1/26

Government control of foreign exchange in relation to economic development (China) DPWP.1/27

Capital formation in Taiwan, 1951-1953—A preliminary finding DPWP.1/28

A plan frame for Burma 1956/57 to 1958/59 ..... DPWP.1/29

B. *Background documents*

No. 1 Techniques of material resources budgeting (E/CN.11/I&T/97)

No. 2 Analysis and projections of economic development (E/CN.12/263)

No. 3 Report of the ECLA/TAA Economic Development Training Programme (E/CN. 12/376)

No. 4 Second Five-Year Plan—The framework (India)

No. 5 Agricultural and land programmes in free China

No. 6 A brief description of the Four-Year Economic Development Plan for Taiwan

No. 7 A review of the economic situation of the Republic of China

No. 8 Increase of agricultural production through improved technique in Taiwan

No. 9 Six-Year Development Programme of Pakistan 1951-57[1]

No. 10 Pakistan looks ahead[1]

No. 11 Report of the Economic Appraisal Committee (volumes I & II)[1] (Pakistan)

No. 12 Pakistan, 1954-55[1]

No. 13 Progress of economic development in Pakistan[1]

No. 14 Pakistan International Industries Fair (Department of Supply and Development, *Weekly Bulletin*)[1]

No. 15 Speech delivered by the Governor, State Bank of Pakistan on the occasion of the 7th Annual General Meeting of the Bank[1]

No. 16 National income estimation in Pakistan, 1952-53[1]

No. 17 Report on currency and credit, 1954-55[1] (Pakistan)

No. 18 Explanatory Memorandum on the Budget of the Central Government for 1955-56[1] (Pakistan)

No. 19 White Paper on the Central Budget, 1955-56[1] (Pakistan)

No. 20 Why planning in economy? (Indonesia)

C. *Information papers*

List of participants ..... DPWP.1/INF/1 and Rev.1

List of documents ..... DPWP.1/INF/2 and Rev.1

Guide to working papers, in relation to agenda items ... DPWP.1/INF/3 and Rev.1

1. For reference, single copy available at the office of the Director, Research and Planning Division.

Appendix 3

AGENDA

1. Target setting[2]

   (*a*) Evaluation of factors limiting the rate of capital formation in the ECAFE region

   (*b*) Evaluation of other major determinants of economic growth and progress in the region

   (*c*) The choice of primary working targets, *e.g.* employment, output, income, capital formation or consumption

   (*d*) Methods of target setting

   (*e*) Value and limitations of aggregative models as an aid to planning

2. Aspects of programme formulation

   (*a*) Determination of development priorities

   (*b*) Inter-industry co-ordination

2. There is no implication, either here or elsewhere in the agenda, that uniform solutions to economic development and planning problems are desirable or possible throughout the ECAFE region. There presumably are common principles, but the conclusions drawn will vary with differences in the circumstances of countries.

(*c*) Budgeting of scarce resources, including foreign exchange

(*d*) Co-ordination of public and private investment

(*e*) Incorporation of external assistance in the development programme

3. The "apparatus" of planning

(*a*) Qualifications of planning staff; place of planning organization in government structure; relation of planning to implementation

(*b*) Essential statistics.

Appendix 4

ANNOTATED AGENDA

Agenda items 1(a) and 1(b): Determinants of economic growth

1. Have any quantitative estimates been made of how much capital your country could effectively use at successive stages, as distinct from expected availabilities? If not, would such estimates be useful?

2. What are your views on the various factors limiting capital formation; for example:

(*a*) What part of gross capital formation is absorbed by depreciation, and to what extent could this part be reduced by better maintenance or otherwise?

(*b*) To what extent is the rate of capital formation limited by non-essential consumption?

(*c*) To what extent is it limited by inadequacy of suitable institutions for mobilizing savings?

(*d*) How far do you think surplus labour can be mobilized for capital formation?

3. To what extent is it realistic to expect that the rate or volume of domestic saving can be raised in your country within the next five or ten years?

4. Can you, as an expert, offer any suggestions or proposals that you think might have a practical chance of adoption, to help increase the amount or improve the form of either private or public capital coming from outside the ECAFE region?

5. Aside from the importance of increasing capital formation, how would you rank the following in terms of the relative importance of the contribution each is potentially able to make to the economic growth of your country over the next 10 years:

(*a*) government expenditures (over and above capital expenditures) for education and training,

(*b*) government non-capital developmental expenditures for improving conditions of health,

(*c*) government non-capital expenditures for exploration and any other developmental purposes,

(*d*) concentration of capital expenditures in producer-goods (or heavy) as contrasted with consumer-goods (or light) industries,

(*e*) greater diversification of production,

(*f*) better production techniques,

(*g*) more complete utilization of available labour,

(*h*) more complete utilization of natural resources and capital plant,

(*i*) mobilization of popular participation through community development projects or other forms of group activity,

(*j*) development of a stronger class of entrepreneurs,

(*k*) improvement of public administration (including administration of public enterprises),

(*l*) avoidance of economic instability,

(*m*) population policy, and

(*n*) any other factor not mentioned above?

6. Do you consider the capital/output ratio a useful concept for planning purposes? If so, would you, in defining it, use the average or a marginal ratio? If the latter, should capital be taken as gross or net? Would you make allowance for the "gestation period" of investment, take capital as including working capital, take it as including "capital-like" expenditure? Is the concept of sectoral capital/output ratios useful?

Items 1(c) and 1(d): Choice of primary working targets and methods of target setting

1. Do you think it more practical in your country at present to have only an investment programme for the public sector, with targets for individual pro-

jects, than to have a set of over-all targets for the economy? What possible repercussions on the economy as a whole has a planning authority to consider when the available information only makes possible the compilation of an investment programme for the public sector?

2. How important is employment as a target in the development programme of your country? What are the economic and social considerations in favour of choosing employment rather than income or consumption as a primary target?

3. Are long-term targets (*e.g.* 20 or 30 years) desirable as a guidepost for a series of plans of shorter periods (*e.g.* 5 years)? To what extent should the latter periods be broken down to indicate interim targets to be reached at the end of, say, each year?

4. How should over-all targets of income, employment, investment, and consumption be co-ordinated in a development programme? Are an estimated capital/output ratio, a capital/labour ratio, and a rate of savings used for this purpose by your government? To what extent would the statistical margin of error affect the consistency and feasibility of execution of such a programme?

5. To what extent are the targets contained in development programmes in the nature of forecasts? How can governments fix realistic targets for the private sector?

6. To what extent can the programming approach be used in the setting of sectoral targets in the development plan of your country? Is there any estimate or attempt at estimating (*a*) the income elasticities of demand for essential consumption goods, (*b*) the degree of import substitution, and (*c*) the foreign demand for home exports? How important are such estimates in the setting of sectoral production targets?

7. To what extent has the "sectoral approach" been used in target-setting in the development programme of your country? Can the projection of past trends be used to provide guideposts for setting sectoral production targets? What modification should be made? How is the consistency of a set of sectoral targets best ensured?

8. To what extent has your country adopted the technique of repeated adjustments between over-all and sectoral targets in formulating its development programme? Can the development programme of your country accommodate additional projects or drop marginal projects as circumstances require, without distorting the whole programme? How can such flexibility best be achieved?

Item 1(e): The value and limitations of models as an aid to planning

1. What types of quantitative models are operationally most useful? Has your government used any model, either directly or indirectly, in target-setting and programme formulation?

2. To what extent does the application of models to economic planning help planners to find out what types of statistical knowledge are most lacking?

Item 2(a): Determination of development priorities

1. Do you think the capital/output ratio for individual projects can serve as an indicator of the over-all effect of such projects on national income? What adjustments are required?

2. Are attempts made in your country to compute the indirect as well as direct costs and benefits of projects? What techniques are used for this calculation? What methods of valuation are employed? What difficulties are experienced?

3. Is preference given to quick-yielding projects? If so, in what fields and on what grounds?

4. On what principles is the allocation of investment funds as between overhead projects and directly productive projects determined?

5. In your judgement, which are the sectors in your country in which labour productivity can be raised in the near future with the smallest investment per unit of additional returns? Would this be in the direction of agriculture or industry, and in the direction of labour-intensive or capital-intensive techniques?

6. Is there any need in your country, for reasons of providing employment, to protect small industries or cottage industries where productivity of labour may be lower than in more mechanized forms of production? To what extent is it desirable to sacrifice higher productivity for the objective of fuller employment? Does labour-intensive technology impede subsequent technical progress? How can co-ordinated development be organized so that technology may improve without creating unemployment?

7. In allocating investment, should use be made of any concept of "balanced growth", or should attention be focused on rapid progress in certain "strategic" sectors?

8. Is the list of projects which are designed to take advantage of inter-industry relations, cited in the section of document ECAFE DPWP.1/2, dealing with "Creation of external economies", of practical importance? Is it comprehensive?

9. How far does the availability of foreign resources affect the scheme of priorities in your country? Is priority given to foreign-exchange-saving and foreign-exchange-earning projects? If so, on what calculations is this priority based? What is the relative priority given to export promotion and import substitution projects? How are present and future foreign exchange earnings balanced against each other?

10. To what extent is diversification of production deliberately set up as a priority criterion in your country? What kind of diversification is aimed at:
    (*a*) Production for the home market?
    (*b*) Production for exports?
    (*c*) Diversification of agriculture?

Item 2(b) and 2(c): Inter-industry co-ordination and resources budgeting

1. Does your country have a programme for occupational redistribution of the population between agriculture and industry, as an integral part of its development programme? To what extent is the cost of such occupational redistribution taken into account? To what extent is an attempt made to minimize the need for geographical redistribution by encouraging rural industries, rural public works, etc.?

2. To what extent do you think the raising of agricultural productivity is a prerequisite to development in your country? Or should industrial investment precede development of agriculture in your country? Or should the initial development be "balanced", and if so, in what way?

3. To what extent do you think input-output analysis could be usefully applied to your country's economy, considering:
    (*a*) Availability of data?
    (*b*) Proportion of inter-industry transactions in the gross turnover in the economy?
    (*c*) Size of subsistence sector?
    (*d*) Size of the exogenous sectors (rest of the world, government consumption, etc.)?
    (*e*) Extent to which past coefficients and coefficients from more advanced countries may not be valid for planning?
    (*f*) Any other relevant factors?

4. In case a national input-output table is deemed to be difficult to work out, how is inter-industry co-ordination to be achieved?

5. Is any budgeting of scarce commodities done in your country? What method is used to formulate these budgets? How do they affect the development programme? Do you make use of any standard input coefficients (unit requirements of factors of production) for this purpose?

Item 2(d): Co-ordination between public and private sectors

1. What is the demarcation between the fields of economic activity for public and private sectors in your country? What are the principles for such demarcation? What are the fields where there is competition or a sharing of production activities between public and private enterprise?

2. What methods are used for forecasting the response of the private sector to:
    (*a*) Larger incomes?
    (*b*) Provision of public services?
    (*c*) Increased or revised taxation?

Item 2(e): Incorporation of external assistance in the development programme

1. Should foreign financial assistance be tied to specific projects? What are the advantages and disadvantages of this procedure?

2. In order to facilitate the incorporation of external assistance in development programme, what are the desirable characteristics in respect of:
    (*a*) Form of assistance?
    (*b*) Degree of certainty or continuity?
    (*c*) Timing?

3. What are the possibilities of using surplus commodities from assisting countries to speed up economic development?

4. Are counterpart funds a useful device in connection with foreign assistance to development programmes?

5. What type of arrangement for consultation etc. between assisting and assisted countries has been found most useful or could be recommended for facilitating the incorporation of external assistance in national development programmes?

6. Do you think it desirable and feasible to organize any Asian regional fund or development bank to pool together resources of various countries for development of the region?

Item 3(a): Planning machinery

1. In your view, what should be the place of the planning agency in the governmental structure, and what should be its functions and responsibilities in order to ensure:
   (*a*) Continued contact with the policy making authority and
   (*b*) Access to all data bearing on the formulation of a programme and its evaluation with a view to continued adjustments?
2. Is it better for the planning agency to prepare one programme based on policy objectives laid down by the policy authority or several programmes with different policy implications, in order to help the policy authority to choose from among the alternative programmes?
3. What is the best arrangement for securing close and smooth working relationships between the planning agency and government departments, including the treasury? By what consultative or other arrangements can the various instruments of the government's economic policy, apart from the financial budget (*e.g.* monetary and credit policies, price policy, wage policy, encouragement, and/or control of industry, etc.) be geared to the development programme?
4. How best can private action be brought into consistency with and support of the development programme? Can such accord be secured through consultative or other arrangements for placing representatives of the private sector on the planning body or associating them closely with it?
5. Should the collection of statistics and economic research be included in the functions of the planning body or be co-ordinated by it?

Item 3(b): Essential statistics

1. In determining the rate of growth to be attained through your country's plan, has any use been made of historical data on national income and savings?
2. In formulating the development programme—or in drawing up the annual government budget—what indicators of the economic condition of the country are utilized? What data are used for making projections of the impact of the development programme (or of the budget operations) on the economy?
3. Are any forecasts of the balance of payments made? What data are used for estimating the balance of payments effect of the government's expenditure programme?
4. How much importance do you attach to the availability of the following statistics for the formulation of development plans:
   (*a*) National income statistics and related aggregates such as consumption, saving, capital formation, etc. (or national accounts),
   (*b*) Input-output tables,
   (*c*) Consumption statistics:
      (*i*) Selected final consumption goods—food, clothing, housing, etc.,
      (*ii*) Selected intermediate goods—coal, steel, electricity, etc.,
      (*iii*) Consumption of final goods by income groups,
   (*d*) Production statistics of selected articles and production indexes by sectors, such as an agricultural production index and an industrial production index,
   (*e*) Population statistics, vital statistics, and population projections,
   (*f*) Labour force and employment statistics,
   (*g*) Productivity statistics,
   (*h*) Trade and payments statistics,
   (*i*) Wage statistics,
   (*j*) Price statistics—wholesale, cost of living,
   (*k*) Financial statistics—public finance and money and banking,
   (*l*) Natural resources surveys and land use surveys, and
   (*m*) Capital stock or national wealth statistics?
5. Is your country going to take a census of population, of agriculture or other economic censuses in the next few years or around 1960? Do you consider these censuses will help to improve the quality of future development plans? If so, in what respect?
6. To what extent may sample surveys, either already planned or contemplated in the near future, serve the above purpose until a complete census can be undertaken?

PROBLEMS AND TECHNIQUES OF ECONOMIC DEVELOPMENT PLANNING AND PROGRAMMING WITH SPECIAL REFERENCE TO ECAFE COUNTRIES[1]

Introduction

It will be evident from the study of this paper that at no point does anything approaching a ready-made solution or scheme emerge. Under all the headings considered here—the respective role of capital formation and other factors in producing economic growth, methods of target setting, of taking advantage of inter-industry relations, of assigning priorities and allocating resources, of combining sectoral targets, of establishing planning machinery—in every case it is found not only that a great variety of circumstances and arrangements actually exists, but further that differences in circumstances and objectives make a great variety of arrangements inevitable and in fact desirable. It is not as to anything so final as a definite investment pattern, or a definite piece of planning machinery, or a definite system of priorities that general rules can conceivably be formulated, but as to the best manner of approaching these problems, of maximizing the advantages and minimizing the disadvantages of given situations and resources by supporting judgement with analysis, and of avoiding irrelevant or false issues.

The reader of this paper will note the many issues which emerge from the analysis as false alternatives. Capital formulation *or* better use of existing capital—aggregate planning *or* sectoral planning—programme approach *or* project approach—agriculture *or* industry—physical *or* financial targets—central *or* departmental planning: all these and others may be seen as posing problems of inter-relations and mutual complementaries rather than of exclusive choices. If it were true that choices could be recommended, then the number of possible approaches to economic development would be limited. In actual fact, the question is one of combination rather than choice, and the number and forms of such combinations are virtually unlimited.

As a practical application of the foregoing, the paper strongly suggests that the subject of development planning is not one which would lend itself to generalized advice in this region. Any advice given would have to be directed to particular countries at a particular time and based on particular circumstances.

If this conclusion seems unduly negative, it should be seen in the light of the further evolution of thought in the course of the discussion at the meeting of the Working Party of Economic Development and Planning. Before we can hope to find right solutions, we must find the right way of approaching the problems involved, the right material to use and the right questions to ask, and the implications of answers given to the questions concerning development programming. When combined with an appreciation of an existing situation and the particular circumstances and objectives, techniques thus developed may hold out the promise of a result which is a consistent whole deserving the name of "programme" and which will help to provide a real basis for accelerating development.

Even a consistent development programme is of course only an intermediate stage. The final end sought is economic development. A good programme will have to be combined with good development policies—and even with reasonably good luck—before it can help to accelerate growth. But in this paper we are concerned with the more modest aim of studying the process of producing a consistent programme—one that governments will feel disposed to treat not as a work of art, but as a tool in the service of accelerating development.

Finally, two major conclusions definitely emerge from the analysis that follows, as they must come to light in any serious treatment of the problems of development in the ECAFE region. First, that the role of governments is of crucial importance for the whole development process in this part of the world. Second, that international co-operation, aiding that process, is essential.

Major determinants of economic growth

The rate of economic growth may be analytically considered as being the function of two factors, (*a*) the rate of capital formation and (*b*) the capital/output

1. Revision of United Nations document ECAFE/DPWP.1/2, a working paper prepared for the Working Party on Economic Development and Planning.

ratio[1]; accordingly, development policies may be described as aiming to increase the former, reduce the latter, or do both. The practical advantages of this classification sufficiently outweigh the disadvantages so that it will be used here.

A nation's rate of capital formation is not an exact measure of the degree to which that nation is willing and able to sacrifice or abstain from present consumption in order to advance future welfare. On the one hand, certain allocations of resources not conventionally classed as capital formation, such as current expenditures on education, public health, etc., also involve abstinence or sacrifice; on the other hand, the element of sacrifice may be attenuated or even wholly absent where the capital formation results from foreign loans or grants. Neither is the question of how high a rate of capital formation a nation can achieve exactly the same as the question, "Where is the money coming from?" An element of capital formation which, although neglected in the statistics, is important in many countries of the ECAFE region today and appears to have an even larger potential role tomorrow, requires little or no money since it takes place in the non-monetary sector in the form of farm improvement, rural public works organized under community development projects, etc. Despite these important qualifications it remains roughly true that capital formation is closely associated, in actuality and in the minds of responsible policy makers and administrators, with the principle of sacrifice and the practice of providing hard-to-come-by finance.

This fact distinguishes the rate of capital formation, generally speaking, from the category of "all other" major determinants of economic growth—a diverse group but alike in having more to do with making the most intelligent use of existing assets and advantages than with adopting principles of self-denial. The various items in this "all other" group can be classed together because all of them affect the capital/output ratio, *i.e.* as progress is made, they increase the output obtainable with a given rate of capital formation. Grouping them together does not mean that they are individually unimportant—the fact is, they are fundamental. Care must also be taken not to endow the capital/output ratio with the force of a determinant in its own right, when in reality it is only the mathematical resultant of other, real forces. If these cautions are observed, no serious misunderstandings should arise.

Rate of capital formation as a determinant of economic growth

Information on rates of capital formation in countries of the ECAFE region is uneven and inadequate. Known rates are generally too low to generate rapid economic development. The *Economic Survey of Asia and the Far East 1954* provides some data on this point. Assuming an incremental capital/output ratio of 2.5:1, a development target of raising per capita incomes by 2 per cent per annum would require in the ECAFE region a rate of net capital formation of 9 per cent of the national income. The accuracy of such conclusions depends, of course, on the accuracy of the assumption; for example, the required rate would be higher if the capital/output ratio should turn out to be higher than 2.5:1 or if the rate of population increase should be higher than the rate of 1.6 per cent per annum assumed in the above calculation. Existing rates of net capital formation nearly everywhere fall short of 9 per cent.[2] Indeed there are countries in the region where the existing rate of capital formation does not appear to be enough to arrest a steady decline in the per capita income.

Domestic aspects of low capital formation: The low per capita incomes in the region generate the familiar vicious circle of low saving potential—low investment potential—low output and income. In this regard the immediate effects of the concept of a welfare state, now widely accepted in many countries, are far from clear. If this movement is initiated by an increase in the taxation of the richer groups, it may at the same time increase taxation yields and reduce consumption in favour of public development resources, but greater equality when achieved may also weaken the private savings potential.

1. Rates of capital formation may be given gross (gross capital formation divided by gross national product)or net (net capital formation divided by net national product or by national income). The term, capital formation, covers the change in assets from the beginning to the end of the accounting period under review, assets being here defined as including fixed means of production, all buildings, and stocks of goods including goods in process. The concept of the capital/output ratio seemingly implies that capital formation *causes* output to increase (the rate of increase or size of the ratio being, however, also influenced by various other factors at work in a given situation), and from that point of view it should logically be defined as the quantitative relationship, in some sense, between antecedent capital formation and subsequent (consequent) output. Thus the average capital/output ratio would be the relationship between the total stock of capital in a given country at the beginning of a certain time period and the output (gross or net) during that time period, while the more widely cited incremental capital/output ratio would be the relationship between the net capital formation of a certain time period and the additional net output that results in the first subsequent time period in which the effects of that capital formation can be fully felt. However, because of the practical difficulties of applying the pure causal concept in the case of the incremental capital/output ratio and also because the focus of analytical interest is in fact largely on the "other factors" which come into play and which are independent of the technical properties of the capital itself, the incremental capital/output ratio is usually interpreted instead as the relationship between increment of capital and increment of output, both in the *same* time period, and this usual practice will also be followed here. In short, the ratio will not imply a causal theory; it will indicate a statistical association. Some "distortion" of ratios (from the causal point of view) may, of course, result from this practice—upwards when rates of capital formation, or the periods required for the resulting products to mature, are increasing, downwards when they are decreasing.

2. Japan, however, is a clear exception to this. The rate of net capital formation has been estimated to be higher in Burma and Ceylon also.

Low incomes are not the entire explanation of a low rate of capital formation. Incomes in the developed countries were also very low at one time, but a certain combination of social and economic factors[1] made substantial capital formation possible. Correspondingly, in the ECAFE countries low investment rates are also due to a combination of social and economic factors, in addition to low incomes.

Among the factors combining with low incomes to retard capital formation in the ECAFE region, inadequate institutional arrangements for mobilizing savings (both private and through taxation) and lack of inducement to find or develop productive outlets are of particular importance. These two obstacles are interrelated. The existence of productive outlets for investment would help to call forth the institutions for mobilizing the financial resources, and also the existence of the institutions and policies for mobilizing savings would probably encourage the search for productive outlets for these resources. The inadequate mobilization of financial resources has been the subject of discussion in two earlier ECAFE working parties on the mobilization of domestic capital.[2] The lack of inducement to invest is partly the result of the fact that there has been little capital formation in the past, so that external economies and essential services are largely absent; it is also due to the attraction of other outlets for personal savings—the hoarding of gold or precious metals, speculative accumulation of commodity stocks, etc.—and to an insufficiency of entrepreneurship in both the private and the public sectors. Unquestionably, the creation of productive investment opportunities and outlets is at least as fundamental in development programming, as the increase in resources available for productive investment.

A point deserving more attention than it has received is that net capital formation could be increased if the requirements for replacement of existing capital in the region, now estimated at around 7 to 8 per cent of national income, could be reduced by better maintenance and care of plant and equipment. A more familiar consideration is that the saving or taxation potential could be increased by a reduction of inessential consumption, as by the scheme of priorities incorporated in a development programme and the import restrictions associated with it. While increased future consumption is the ultimate goal of development, the desire for substantial immediate increase—sometimes showing the "demonstration effect" of consumption standards in technically more advanced countries[3] can be an important factor in reducing resources available for development. Increases in national income have, in fact, often failed to lead to corresponding increases in the rate of capital formation, and increased exports have often been matched by increased imports of less essential consumption goods.

To some extent, savings are put into idle balances rather than into investment. This factor, together with the availability of under-utilized real factors, suggests an opportunity for increasing rates of capital formation by deficit financing. The possibilities and limitations of deficit financing have been analysed elsewhere.[4] Limitations of available physical resources of course constitute the crux of the development problem, and the establishment of a proper relationship between the financial resources brought into play and physical resources is one of the fundamental tasks of development programming.

If the development programme exceeds currently available financial resources, the gap may be bridged in three ways: (*a*) by adjustment in the balance of payments, *e.g.* by running down foreign exchange reserves, increasing foreign indebtedness, or obtaining foreign grant aid;[5] (*b*) by a fuller utilization of existing physical resources with little or no inflation, making possible an increase in real income through credit expansion or deficit finance, if under-utilized physical resources exist; or (*c*) by an inflationary development —which in turn may lead to a subsequent increase in output provided supply is reasonably elastic under the pressure of increased effective demand. This last possibility may be regarded as the creation of a "disequilibrium system" intended to provide incentives for increased production. Obviously, development programmes operating an excessive "disequilibrium system", *i.e.* with demand too much in excess of available resources and operating in the face of insufficiently elastic supply, technical bottlenecks, etc., may generate inflation to a degree that will distort programme priorities and defeat its own purposes by reducing the incentive to save.

In view of existing low levels of consumption and incomes, special importance attaches to efforts to raise capital formation initially without a reduction in consumption ("privation"), either by increased output ob-

1. Among which might be mentioned the lower population pressure (relative to that prevailing in much of Asia and the Far East today), higher per capita natural resources, access to overseas areas, absence of demonstration effects of higher consumption elsewhere, rise of a class of innovators and entrepreneurs, etc.

2. See *Report of the Second Working Party of Experts on Mobilization of Domestic Capital* (UN Publication Sales No. 1953.II.F.4).

3. Although it is difficult to give precise evidence of the so-called "demonstration effect", the considerable share of imports which may be treated as luxuries (in relation to the state of economic development) in the total import trade of many countries is a pointer to this.

4. See Report of the Second Working Party on *Financial Aspects of Economic Development* (E/CN.11/I&T/106); also, "Deficit finance for economic development with special reference to ECAFE countries", *Economic Bulletin for Asia and the Far East*, vol. V. no. 3, November 1954.

5. For a discussion of foreign aid in relation to development programming, see *infra* pp. 53ff.

tained with existing capital equipment, or by methods of non-monetary or direct capital formation such as community development which utilizes free labour time.

Capital formation may be speeded up by "austerity" rather than by "privation". Once incomes have been increased, by whatever method, it becomes possible in the second stage to plan for relatively high *marginal* rates of savings out of the additional income, and the rate of capital formation can then be increased correspondingly. A number of ECAFE countries have drawn up their development programmes on the hypothesis that fairly high marginal rates of savings can be achieved. For instance, in the first Indian Five-Year Plan the marginal rate of saving was planned to be 20 per cent of the additional income, and a rate as high as 50 per cent was then contemplated for the subsequent period. In the draft frame of the Second Plan marginal rates of savings of about 25 per cent are contemplated over the average period of the Plan. Precise and realistic measures to ensure that such targets will in fact be reached are, of course, highly important.

International Aspects: The rate of capital formation achievable by a country's unaided efforts can be supplemented by bringing the resources of other countries to bear through foreign trade, foreign investment, and foreign aid.

Where trade is balanced—imports being fully paid for by exports—, it is true in a sense that the resources used are really those of the country itself, *i.e.* the resources used to produce the exports in question. Even then, such trade can be of the greatest importance by enabling an under-developed country to draw upon the natural resources, technical knowledge, skills, and other factor endowments of the rest of the world, thereby removing bottlenecks, improving the elasticities of supply, and in general lowering the capital/output ratio. In addition, for many countries of the ECAFE region the position is that certain needed types of equipment can at present only be obtained from abroad, so that, even when trade is balanced, it provides an instrument by which capital formation can be accelerated.

Yet the main ways in which international co-operation can raise a country's rate of capital formation are clearly through foreign investment (including loans) and foreign grants. Here the recipient country acquires imports not paid for with exports, and thus it makes a net draft on the resources of the outside world. Technical assistance, one of the most important forms of international co-operation, is not generally classified with capital. However, the essence of the process of foreign investment and foreign aid is that the receiving country is thereby enabled to add to what it can do for itself in the way of capital formation (including what it can do through exports of raw materials or consumption goods in exchange for capital-goods imports).

In view of the limitations on domestic capital formation in the ECAFE region imposed by low incomes and the other factors previously discussed, the possibilities of supplementing domestic resources through outside investment or grants are naturally of outstanding interest. The undoubted need for such outside capital comes up, in the first instance, against the unsolved question of how the flow of capital to the under-developed countries of the world can be greatly expanded. Beyond that, aside from the importance of knowing fairly precisely the absorptive capacity for outside capital at various successive stages of development, there is for each recipient country the question of how far it can safely go in borrowing abroad, considering the limitations on its capacity to service foreign debt.

The *Economic Survey of Asia and the Far East 1954* estimated that at present the total annual rate of external financial resources coming to the region (not counting mainland China and Japan) is less than $1,000 million. Detailed information on this subject has not been compiled, but it is clear that the capital supplied to countries of the region in the post-war period has been more in the form of intergovernmental grants and loans than of private capital. In some countries, taking into account the transfer of interest and profits as well as the export of capital resulting from danger of instability and other factors, there appears to have been in fact a net outflow on private capital account.

Three fundamental factors tending to limit the international flow of capital to the countries of the ECAFE region may now be described. In the first place, foreign private capital has hesitated to venture. Certain of the reasons are fairly obvious. Private capital has been considerably deterred in some cases by political and economic instability, or by a lack of encouraging and consistent policies toward external investment, especially when these are viewed in relation to the excellent investment opportunities available in the investors' home countries. Some gain is to be expected in this regard from the fact that a number of countries in the region have recently revised their investment laws and regulations, making them more favourable to private foreign capital.[1] At the same time, it must be recognized

1. The earlier Secretariat study, *Foreign Investment Laws and Regulations of the Countries of Asia and the Far East* (UN Publication Sales No. 1951.II.F.1) is now in process of revision. It is expected that the new edition will be issued in 1956.

that a profound change has come over the world with the emergence of so many countries as independent entities. In colonial times, capital could often flow to the region without appearing to go "abroad" at all. This is no longer so; moreover, the largest potential capital exporter to the region is relatively new and inexperienced in that role. Adjustment to this basically new situation is bound to take time.

In the second place, because of the absence of an "infra-structure" of basic facilities (transport, power, etc.), the productivity of new capital in many fields of activity in the ECAFE region is perhaps lower and certainly not clearly higher, in spite of its scarcity, than in the capital-exporting countries. Thus, the opportunities for profit-making private capital are relatively limited at present, particularly within the framework of balanced national development plans. When public capital has built the "infra-structure", however, this limitation, too, need no longer operate.

In the third place, even assuming that loan capital—private or public—becomes quite freely available, a limitation on borrowing is imposed by the external debt-servicing burden it creates. The same consideration applies to the remittance of profits on risk capital. It is clear that the development programme should aim at a rate of domestic saving that rises fast enough to catch up with the planned rate of capital formation before the balance-of-payments drain involved in paying for the savings obtained from abroad becomes excessive.

Finally—and this applies especially to intergovernmental and international grants and loans—the inflow of capital into the ECAFE region from abroad has undoubtedly been retarded until now by limitations on "absorptive capacity". For this, the best remedy will be properly prepared projects within the framework of clearly formulated programmes of economic development.

Other major determinants of economic growth

An adequate rate of capital formation is essential for sustained economic growth, but it would be a costly mistake to overlook a number of other factors that also can play a fundamental part in the dynamics of the growth process. These factors increase the output per unit of capital employed, thus lowering the capital/output ratio. (Or, in certain cases, they constitute a danger or tendency in the opposite direction.) Always important, they become all the more so where, as in the countries of the ECAFE region, capital is scarce. In what follows, seven principal factors of this kind will be distinguished.

"Capital-like" expenditures for skill formation, etc.: The fact that capital formation is conventionally defined in a narrow sense, applying to physical assets only, should not obscure the realities of the situation.[1] Non-capital (but distinctly "capital-like") expenditures on health, sanitation, education, formation of technical skills and technical knowledge, etc., aside from their direct benefits in higher levels of living, can be an investment in increased labour efficiency and lead to noteworthy increase in output. This is generally recognized. A number of countries like Burma, Pakistan, and India have placed special emphasis on skill formation and the improvement of labour efficiency generally, through improvement of health and education, in their programmes of development. Surveys and explorations aimed at discovering hidden subsoil assets are another case in point. Most of the expenditures entailed will escape classification as capital expenditures, yet in fact they involve the application of resources to non-consumption purposes, and the contribution to the economic growth of the country concerned if, for example, oil or uranium is found may well exceed by far the contribution made by any comparable sum applied to capital formation in the technical sense of the term.

The allocation pattern of investment: It is obvious that the same rate of capital formation and development expenditure generally may have widely different effects in advancing the development of a country's economy, depending on how or where that expenditure is applied. An appropriate allocation pattern will take due account of inter-sectoral relations, complementarities between projects, and the possibility of widespread external and internal economies in an expanding economic system; an inappropriate pattern will not. In simpler language, there are many different ways in which capital can be used, some considerably better than others in terms of the future rewards they will bring for present sacrifice and effort. Certainly there are motives for investment, such as social prestige, hoarding instincts, etc., which will result in an uneconomic investment pattern—analytically revealed by a raising of the capital/output ratio.

Two decisions appear to be basic here. First is the decision how much to invest predominantly in producer-goods industries (so-called heavy industry, generally speaking), and how much in consumer-goods industries with their more immediate return but usually smaller emphasis on long-term economic growth. The actual decision of the planning authorities in a given country

1. In this connection, see the remarks on the relation between development expenditure and capital expenditure in the *Report of the Workshop on Problems of Budget Reclassification in the ECAFE Region* ECAFE/L.95 (September 1955), para 67.

on how best to settle or compromise this issue may be difficult in the face of conflicting desires, but at least the implications of the two extreme positions are fairly clear.

Even more difficult is the other broad decision which frequently must be made, a decision on the emphasis to be given to diversification of production on the one hand and to specialization on the other. The goal of intra-regional and, more broadly, world-wide division of labour, made possible through international trade, has many attractions. But if, in pursuit of that goal, the "comparative advantages" of the moment are allowed to govern, rather than those that will prevail after all countries are reasonably well developed, economic development may be seriously impeded. It may also be seriously impeded by the instability of export trade. On the other hand, diversification and self-sufficiency, too, can clearly be bought at too high a price in terms of a lowering of not merely present but also future standards of living.

When the ECAFE region as a whole is considered, the export ratio is at present rather low, but it is high in some countries. There is an acute problem of instability of export earnings, as well as the danger of a deterioration of the terms of trade for countries having, at present, a relatively high export coefficient. The development of substitutes represents a threat to some of the export products. Apart from Japan and India, which are now net exporters of manufactured goods, most countries in the region lean heavily on exports of primary goods, and it is difficult to forecast with confidence a rising volume of exports of such primary products with improving or even constant terms of trade, at least in the immediately foreseeable future.

Where export promotion falls short of providing the foreign exchange needed for increased imports of capital goods, import substitution is the logical alternative. One of the difficulties of development, namely the lack of markets, will be absent in the case of import substitution, provided the demand previously satisfied by imports is sufficient for economic operation of a domestic industry. In other cases where the domestic market is insufficient for efficient production, special attention to division of labour among neighbouring countries might yield a partial solution.

Production techniques: A tendency to identify development with expenditures on capital formation may lead to a neglect of possibilities of raising the productivity of the existing capital and labour through more efficient equipment, processes, methods, forms of organization of work, etc. There is need to consider whether output cannot be substantially increased by means of better techniques, with little or no additional capital outlay, or even, in certain cases, a net saving of capital.[1] Productivity centres, technological institutes, cost studies, standardization, etc. can contribute to raising productivity. International technical assistance programmes are largely concerned with this field. Equally necessary are agricultural extension programmes and other national efforts to disseminate more widely the best techniques already known within the country. Most basic of all, perhaps, is the widespread development of an *attitude* favourable to the search for and adoption of better methods—something akin, in its way, to the "productivity consciousness" of a country such as the United States.

The actual technology of more advanced countries may or may not be suitable for under-developed economies, in view of their present limited resources. On the one hand, the possibility of jumping some of the stages through which the now more developed countries had to pass is a great advantage. On the other hand, the best productive techniques in countries of the ECAFE region, with their different resource endowment, will not necessarily be the same as those of the highly industrialized countries, or the latter techniques may require extensive adaptation. Moreover, owing to lack of skills and resources, it is usually not possible to bring about a highly developed technology in all sectors of the economy simultaneously; this raises difficult problems of adjustment, including the decision whether or not to protect or subsidize the less efficient methods of production. Less capital-intensive methods of production may be preferable in some instances, so that technology may gradually improve, keeping step with gradual improvements in the capacity of peoples and administrations to learn the skills required, while in other industries of the ECAFE region (including transportation and power) the use of the technology of more industrialized countries is hardly open to question.

Degree of utilization of resources: The most important under-utilized resource in many parts of the ECAFE region is manpower. Less spectacular than the waste associated with mass unemployment in the industrial countries in past depressions, this idle manpower nevertheless represents for many countries of the region a latent asset that can, if organized, make a great contribution to economic development. Its existence presents an opportunity of increasing output with little or no new investment and of doing this with relatively

1. In other cases, however, the improvement of production techniques may, in fact, require substantial expenditures on re-equipment.

little risk of inflation. Obviously, total output can be raised by employment of previously unemployed persons. In many cases, however, the marginal productivity of such labour is lower than the current wage rate. Where the workers are not willing to accept a wage lower than the current wage rate, or clearly cannot do so, and, where the principles of community development cannot be applied, the answer may be government subsidies for the creation of employment opportunities in the private sector or new development opportunities in the public sector even at "uneconomic" wages. Thus, the gap between wage cost and labour productivity may be bridged.

The fuller utilization of seasonally unemployed manpower is a difficult problem, especially in view of the scarcity of capital resources. Diversification of production may help to eliminate seasonal unemployment both on the farm and outside of it. Cottage industries provide off-season employment at little capital cost, but in terms of more immediate action the problem is often essentially one of organizing such labour for capital construction—which, in turn, will help provide the equipment necessary for a subsequent fuller utilization of under-employed manpower.

What is true of under-employed manpower is for the most part true of under-employed material resources and under-employed capacities generally. In respect of under-utilized natural resources—provided these are known—it is not difficult to determine the types of processing or industrial activities that would lead to their fuller utilization. As a starting point, therefore, it may be useful to draw up an inventory of under-utilized existing natural resources and capital capacities[1] the use of which can help to expand output with a minimum of investment. The incremental income so derived can then also be used for the acceleration of the rate of capital formation in subsequent time periods.[2]

Extent of individual and group participation in development activities: The problem confronting a government that is leading a country along the road to economic development is not one of doing everything itself—under most systems, in fact, that would be quite impossible—but of enlisting the active and, if possible, the enthusiastic, participation of the citizens of the country and thus, in effect, delegating tasks and responsibilities to the greatest possible extent. This has two main aspects: first, in all systems with a significant private sector, individual initiative and entrepreneurial ability should be sufficiently widespread among the people so that high targets can be set for the private sector and can be achieved; second, no bold governmental development plan can succeed without willing acceptance by the people of the implications of the programme and without popular support of the measures proposed for its implementation.

Sustained capital formation can be ensured only in a capital-conscious community, and initiative, prudence, ingenuity, and far-sightedness as well as discipline among the people provide a surer base to that community's economic progress than any specific investment measures as such. A government can, of course, help to make the people capital-conscious, and indeed it must try to do so, but the process is difficult, and the path of such social transformation is not easy to define. One possibility—differing from the situation where attention is given merely to improving the general "climate" and the general opportunities for private investment—is for the state to initiate new enterprises but later to withdraw from areas where individual enterprise has commenced; earlier Japanese history provides an illustration. Pakistan has adopted a similar technique of selling public enterprises into private hands. The Industrial Development Corporation in India has the task of setting up new industries which would not otherwise be established by private enterprise, with the ultimate objective of selling certain of the established industries to private persons or bodies.

Assistance for the initiation and expansion of group effort is the other major opportunity. The mobilization of popular participations for instance through community development projects, as in Burma and India, may not only make the people more development-conscious, transforming their outlook on life, but may also make a significant contribution to capital formation, to improved labour productivity, and to fuller employment.

Vulnerability of economy to instability: Another of the fundamental factors that can help expedite economic development is economic stability. It is perhaps axiomatic that no development is possible without a degree of political and administrative stability. Major upheavals aside, the impact of political changes on the formulation of development programmes can sometimes be reduced through agreement on development programmes among the major political parties or groups, so that a change of political parties in power will not affect development policies, through the creation of a

1. Some under-utilization of natural resources and capital capacities is, of course, economically justified, since the waste through under-utilization of existing capacities may be less than the waste through technically uneconomic operation, or operation where there is a shortage of market demand.

2. Thus, in India, one of the main objectives embodied in the first Five-Year Plan was the fuller utilization of industrial capacity. In this way, industrial output was to be raised without heavy initial investment.

technical, non-political civil service to carry on the administration of the development programme under any government, and possibly through a shift of certain aspects of development work from regular government departments to semi-independent public or mixed corporations.

Internal economic instability can likewise be extremely serious in its effects. It may arise from causes beyond human control, as in the case of crop failure resulting from bad weather. Perhaps the commonest source of internal economic instability, however, lies in a failure to control inflationary pressures which may originate from various sources, including an excessive development programme itself. The instability induced by inflation can be particularly serious in under-developed countries because, as a rule, output is not easily expanded in the short run. On the other hand, a proper development programme will itself reduce the danger of such instability by diversifying the economy and increasing resource flexibility as well as, indirectly, by facilitating the adoption of specific stabilization measures.

Economic instability may frequently come from abroad, generally through violent fluctuations of external demand and prices and, therefore, of export income. In export-oriented primary producing countries of the region, internal fiscal and monetary policies may be inadequate to cope with the impact of such fluctuations. In recent years, development plans in Burma have been completely upset by externally generated instability, and the ability of Indonesia and Ceylon, for example, to plan their development tends to be limited by the same factor. The United Nations Expert Committee's report on "Commodity Trade and Economic Development"[1] dealt with various possible stabilizing devices, particularly from the point of view of under-developed countries. A list of such possible measures would include: individual commodity agreements, multi-commodity agreements, development of trading rules providing for greater stability, stockpiling devices, compensatory capital movements through the IBRD, IMF, or otherwise, national marketing boards, possibilities of international insurance schemes against fluctuations in terms of trade or export proceeds, compensatory monetary measures, etc. If successfully applied, such stabilizing measures might help the countries of the ECAFE region plan with greater confidence, avoid the necessity of periodically revising their development programmes for the sake of restoring stability, and concentrate more on the objective of raising incomes.

1. United Nations Publication E/2519.

Population Factors:[2] A major factor limiting the rate of economic growth and progress in many ECAFE countries is the pressure of population, which keeps per capita incomes low, combined with the fairly high rate of population increase, which adds to the capital required to register any advance. When population is growing at an annual rate of some 1.6 per cent and the capital/output ratio is about 2.5:1, 4 per cent net savings is required merely to maintain existing amounts of capital per person. Moreover, by the prevailing combination of high birth rates and high death rates, the proportion of children is high, the age distribution is unfavourable to production, and much of the investment in children is wasted from the economic point of view because of high rates of mortality at younger ages.

On the other hand, in the long run the process of development itself, with the transformation of the mind as well as the outward face of society which it entails, is no doubt a part of the answer to the pressure of population. In the short run, also, pressure of population provides the labour force required for industrialization, assuming adequate training is available and food supplies can be assured. The possibility of using the reserve of unemployed or under-employed manpower to investment projects also raises the possibility of increasing the rate of capital formation in the economy without any corresponding increase in money savings.[3] A major factor limiting the utilization of such labour for stepping up the rate of capital formation is the difficulties of organization.

Target setting

The choice of targets

Any economic development programme is derived from certain general objectives. Such objectives may be of a qualitative nature, and do not necessarily have a definite or clear time-dimension. For instance, a country may want to achieve, as quickly as possible, food self-sufficiency, a diversification of the economy, greater equilibrium in its international accounts, greater productivity, or a more even income distribution.[4] General objectives may also be somewhat more quantitative in nature, *e.g.* an increase in national income by x per cent, a doubling of the rate of capital formation,

2. The UN Seminar on Population in Asia and the Far East at Bandung in November, 1955, affords an opportunity for a more detailed discussion of this fundamental factor.

3. As previously noted, direct investment of labour in capital formation in the non-monetary sector frequently escapes statistical notice, but it is doubly important in that it not only raises the real rate of investment but does so without generating additional money incomes and, hence, without inflationary consequences.

4. The "objectives" of the Second Indian Five-Year Plan, for example, are described as: (*a*) increase in national income, (*b*) rapid industralization, (*c*) fuller employment, and (*d*) special justice (*The Second Five Year Plan, A Tentative Framework*, Official Working Paper, 21 March 1955, p. 1).

etc. Desired objectives of economic development become "targets" only when expressed in quantitative terms and when broken down into concrete terms, such as individual commodities, or value of aggregates, *e.g.* exports, investment, etc. ("aggregative targets"); generally, targets also have definite time schedules. How high targets can be realistically set depends largely on the major determinants of economic growth discussed in the previous section. The fulfilment of targets leads to the desired objectives; the difference between targets and projections indicates the need for measures to be adopted; the difference between targets and actual events indicates a need for adjustment or new measures.

Usually a country chooses some over-all economic magnitude as an objective and derives targets therefrom. The derived targets must be consistent with the objectives and with each other; with each target set, degrees of freedom with respect to the remaining targets, are lost. The most general aggregative targets may be consumption, investment (and/or saving), income (or output), employment, or some sort of combination of two or more of the above-mentioned magnitudes. Consumption plays a dual role. While it may be—optionally—the planned objective, an improvement in consumption is also the goal and result of any true development, even if other objectives are stated.

What planned objectives a country may choose as a base from which to derive aggregative and other targets, depends mainly on the basic characteristics of the economy, the economic and social problems confronting the country, the stage of economic planning, and political considerations—and sometimes also on the availability of statistics.

Consumption: The over-all objective of economic development planning in poor countries is the improvement of living standards, and this may be expressed, as an aggregative target, by certain specified increases in per capita consumption. However, the increase in consumption requires an increase in output which in turn depends on an increase in investment (to an extent determined by possibilities of raising output by other means also). A higher rate of investment, or capital formation, while resulting in a larger ultimate improvement in consumption, may permit only a small, if any, improvement of consumption at an early stage. Specific targets of consumption, obviously, cannot be fixed independently of targets for income and investment.

Investment: A country may choose investment as a primary aggregative target, deriving from this targets for aggregate income, consumption, saving, and employment. Where data on national income, consumption, or employment are lacking, a bold investment programme may still be formulated, although it will then tend to be essentially a collection of individual projects, with the sum total of investment weighed against estimated total availability of financial resources. Such are the cases of the six-year programmes of Ceylon (1954/55 to 1959/60) and Pakistan (July 1951 to June 1957) and the first five-year plan of mainland China, in which no attempt has been made to give an integrated picture of income, consumption, investment, employment, etc. They are essentially investment programmes. The Pakistan programme includes both public and private investment, although the latter is, naturally, little more than a forecast. The Ceylon and mainland China programmes cover only government capital outlays. It was considered in Ceylon that at present neither the data available nor the machinery of planning are adequate for the formulation of an over-all plan for the economy as a whole.

The disadvantage of having only an investment-*cum*-financing programme, without related income, employment, and consumption targets, is obvious. The magnitude of investment may prove, later on, to be too large and result in inflation, shortages, and/or balance of payments difficulties. For instance, in mainland China the high rate of investment expenditure led to inflationary conditions in late 1953, and price control and rationing have since been resorted to. Though this may have been a policy decision, it may also have been due, to some extent, to the lack of related income and consumption targets. On the other hand, it is also possible that an investment programme unrelated to income targets may prove to be too modest and fail to achieve the warranted rate of growth.

Income or output: A country may also choose a certain rate of increase in national income or output as the primary aggregate target and derive the investment target therefrom. This is the case with the K.T.A. Plan[1] of Burma. The Plan recommended that Burma should strive for a level of gross domestic product of about K 7,000 million (in 1950-51 prices) by 1959/60, which would bring per capita output just above the pre-war level. The restoration of pre-war per capita output as a primary target holds a strong appeal in a country which suffered considerable war-time destruction and post-war civil disturbances. The investment target was derived from the income targets by assuming a certain capital/output ratio. Employment was also treated as a derived target; this was due to the fact that there is currently not much population pressure in Burma, and

1. Prepared for the Government by the Knappen Tippets Abbett Engineering Company.

a high level of employment would be automatically achieved by the restoration of productive capacity and the increase in effective demand through the implementation of the investment programme.

In India, the long-term objective before the planners, in formulating the first five-year plan, was to double per capita income in 27 years. With this aim a phased programme of development was envisaged. For the first five-year plan, with an assumed capital/output ratio of 3:1, two sets of inter-related aggregative targets were set: (*a*) to step up the net rate of investment from 5 per cent of the national income to 7 per cent, through a marginal rate of saving of 20 per cent and (*b*) to raise the national income by 11 per cent.

The general approach of both India's first five-year plan and Burma's K.T.A. Plan resembles the approach taken above when discussing determinants of economic growth, *i.e.* the rate of economic growth as expressed by the increase in national income is considered to be a function of the capital/output ratio and the rate of incremental saving or investment.

Employment: The approach just considered seems insufficient for a country where large unemployment and under-employment exist. A given magnitude of investment, while it may generate a specified increase in national income, could be compatible with different levels of employment. This will depend partly on the pattern of investment, since some projects use more labour per unit of capital than others, and partly on the technique of production, since it is possible, within limits, to apply more or less labour-intensive techniques to a given pattern of investment. Thus, in order to avoid undesirable social consequences, an over-populated underdeveloped country may set employment as the major—or one of the major—aggregate targets. This is the case with the draft frame of the second five-year plan of India. This choice of targets was influenced mainly by experience in the implementation of the first five-year plan; it was observed that unemployment was increasing even though the increase of national income by the end of the first plan was likely to be greater than had been anticipated. This reflects the peculiarities of overpopulated economies, where the need for fuller employment is paramount. In *The Second Five-Year Plan, A Tentative Framework*[1] it is therefore stated: "A large increase in employment opportunities must be regarded as a principal objective—the kingpin—of the second plan."

1. A working paper prepared jointly by the Economic Division, Ministry of Finance and the Economic Division, Planning Commission, in consultation with the Central Statistical Organization and the Indian Statistical Institute.

Japan, also a densely populated country, sets full employment as one of the primary targets in its preliminary six-year economic plan. The targets of gross national product and capital formation are derived from the need to combine full employment to the growing labour force with rising productivity. For Japan, full employment is more suitable as a primary target than for an underdeveloped country. For an underdeveloped agricultural country where considerable under-employment and disguised unemployment exist, full employment is difficult to define as well as extremely difficult to achieve quickly. If full employment is conceived as the provision of jobs to workers in their present occupations, it may lower labour productivity. If, instead, it is conceived as the provision of new employment opportunities by occupational redistribution, it can be achieved only after a long period of years and cannot be used as a short-period target. For Japan, on the other hand, being an industrialized country largely relying on private enterprise, it is natural for the government to set full employment as a primary target.

Fortunately, although the two objectives of full employment and high incomes may at some point diverge and suggest different policies in an over-populated country, they do normally move in the same direction in the earlier phases. The selection of employment as the primary target in such a country necessarily involves an emphasis on labour-intensive investment or investment with a low capital/output ratio. This kind of investment also tends to yield income quickly. Consequently, income is often increased most effectively by the better utilization of unemployed resources, especially manpower. However, in choosing employment as a primary target, there is the possibility of perpetuating less efficient methods of production and of thus having to accept a lower level of labour productivity than might be achieved by choosing income as a primary target.

A transfer of employment (at least in the relative sense) from the agricultural sector may also be a chosen objective of economic development, since such a structural change is a normal concomitant of development. It will reduce the incidence of disguised unemployment and reflect a higher average labour productivity and income. Such a transfer of employment, if quantified and given a time schedule, can also be an actual target. The implications of setting this kind of target will be discussed later on under the heading, "Resources budgeting and inter-industry co-ordination".

Inter-relations: Given natural resources and technology, the realization of a certain level of output depends on the degree of utilization of labour and the

amount of capital at labour's command. Thus, if a country chooses output as a major target and decides upon a certain volume and pattern of investment to achieve the target, employment will find its own level, as determined by the capital/labour ratio which in turn is implied in the investment programme. Alternatively, if a country chooses employment as a primary target and decides upon a certain volume and pattern of investment to achieve the target, output will find its own level, as determined by the capital/output ratio which in turn is implied in the investment programme.

It seems that in both cases consumption becomes a residual. However, in the determination of the over-all magnitude of investment, the planning authority will already have taken consumption into account by assuming a certain volume of obtainable saving, and hence a corresponding income-consumption function. Here the choice before the planning authority is whether to ask people to forgo some consumption in the immediate future in order to attain a high level of output and consumption in the more remote future (through a high rate of capital formation in the beginning) or to enjoy as quickly as possible the fruits of development but be satisfied with a smaller increase in output and consumption in the more distant future (because of a lower rate of capital formation). This is a policy decision, and the first of the two choices may require controls, as in mainland China.

Although a country may choose one major target in the initial stage of evolving a development programme (usually closely linked with its ultimate objective), the importance of consistency of such a target with other targets is, by and large, so clear that most countries will in fact in the end feel a need to formulate a set of inter-related targets.

Methods of target-setting

The nature of targets: Targets should normally have a time-dimension. Thus, there could be long-term targets, short-term targets, or interim targets.[1] A target to be achieved over a long period, say thirty years, may represent the ultimate policy objective in the sense of achieving a new economic balance. Short-term and interim targets do not require the same degree of balance, since in the phasing of a development programme some sectors might perhaps move ahead of the general line of advance. The economy would then develop through a process of stimuli and adjustments, or a temporary "disequilibrium system". Usually, however, some sort of balance is planned within a plan period, say of five years.

A country may also set some interim targets within the plan period, *e.g.* annual targets as in the Philippines' draft five-year programme and Burma's revolving three-year plan which is to start in 1956/57. At the end of every year, another year is added and the new programme is adjusted to changed conditions. Thus, the plan periods overlap. Under this system, targets are continually being revised, and the most important task is the fulfilment of the annual interim targets.

"Targets" may become of the nature of mere "projections" when they are based on what is likely to happen by some future date, under certain assumptions, by letting things follow their own course without special efforts or new policies on the part of the government. This is likely to happen where, in the effort to make the targets realistic, no more than minor adjustments for the possible effects of new measures are made. In this case, the planning authority does not want to risk setting a target too much in excess of the country's ability to achieve it within a specified period.

Targets in the public sector differ in nature and significance from those in the private sector. While the former are direct indications of a policy intention to implement on the part of the government, the latter usually represent either guesses of what is likely to happen or a statement of what the government would like to see happen, or would propose to stimulate, by appropriate policies in the private sector. However, for certain large and/or strategic industries, the government may have definite policies (including allocation of materials and labour, provision of credit facilities, etc.) designed to induce the private firms to reach certain production targets so as to enable other related fields or industries to achieve their targets. The stronger these policies, the closer the private sector targets resemble the public sector targets in nature[2]

A fully integrated development programme contains a set of consistent (and inter-related) targets. This requires that not only the various aggregates but also aggregative and sectoral targets should be consistent with each other. The choice of primary aggregative targets concerns concepts like consumption, investment, income, and employment. Once determined these aggregative targets determine in turn the broad pattern for sectoral targets.

1. In India, the aim was to double the *per capita* income by 1977. The aim was to be achieved by five five-year plans, with each plan having a consistent set of targets, leading ultimately to the final target of doubling per capita income in 27 years. In Japan, an integrated development programme is formulated with long-term targets for some sectors to be achieved in 13 years and general aggregate targets to be achieved in 6 years. The first six-year plan is again divided into two stages, with three years in the stage.

2. See also the section, "Co-ordination of public and private investment".

Sectoral targets, broadly speaking, may be fixed at two stages: (*a*) production and consumption on final goods and services and (*b*) requirements and supply of intermediate and capital goods as well as transport and energy services. In a way, the latter stage is part of the formulation of investment requirements and budgeting of material and manpower resources rather than of target-setting, although it is customary to refer also to targets for the production of intermediate goods, *e.g.* steel. This section deals primarily with methods of setting aggregative targets and production targets of final goods and services in broad individual sectors.

To formulate a set of consistent targets, a planning authority may proceed from given aggregative targets to the setting of sectoral targets or the other way round. The former way is the so-called "programming approach"; the latter may be called the "sectoral approach". A planning authority may also adopt a "mixed approach", using both methods. All these methods require adjustments which will be discussed later.

Co-ordination of aggregative targets: No matter which approach is adopted, it is important that the aggregative targets should be well co-ordinated. The co-ordination between income, investment, and consumption targets may be sought through a system of national accounts and through the estimation of the incremental capital/output ratio as well as the incremental saving-income coefficient. The latter involves either assumptions regarding the consumption function or the adoption of certain government policies towards private consumption. The quantitative relationship between incremental employment and investment depends on the capital/labour ratio, which can, to a certain extent, be varied by adapting technology to the requirements of a country. Essentially, both the over-all capital/output ratio and the over-all capital/labour ratio depend on the pattern of investment.

Co-ordination of aggregative targets also has an international aspect. Exports determine, roughly, the capacity to import, while the degree of import substitution and the capacity of domestic production to expand under the stimulus of increased demand generated by higher export earnings (especially in export-dominated economies) between them determine a set of feasible over-all targets. This co-ordination should be based on foreign exchange budgeting.[1]

Such an attempt at achieving consistency among aggregative targets of income, investment, and consumption has been made in India's two five-year plans. With the objective of doubling per capita income within 27 years and with an assumed capital/output ratio of 3:1, it was postulated in the first plan that the rate of investment should be stepped up from 5 per cent to 20 per cent of the national income, and this was to be achieved by a marginal rate of saving of 20 per cent in the first five years and a marginal rate of saving of 50 per cent thereafter. The income and investment targets for the first five-year period were also set accordingly. Similarly, the draft frame for the second five-year plan aims at a 25 per cent increase in the national income, or 5 per cent per annum as a first approximation. If net investment is stepped up from roughly 7 per cent to about 11 per cent of national income by the end of the second plan, total consumption should increase roughly by 20 per cent and per capita consumption by 12 to 13 per cent in the course of the second plan.

The six-year economic plan of Japan uses the employment approach. As full employment has been set as a primary target, the plan starts with estimation of the labour force from population growth and the proportion of labour force to the population. The plan then visualizes an increase of labour productivity and a reduction in average weekly working hours. On the basis of the above three factors, the amount of goods and services to be produced is estimated and the gross national product target is determined. The next step is to estimate the volume of investment and consumption required to sustain this gross national product. Personal consumption expenditure is estimated to increase at the same rate as the gross national product, while the rate of increase of investment in producers' durable equipment is estimated as twice that of personal consumption expenditure. The consistency between employment, income, and investment targets in this case depends chiefly on how accurate is the estimate of the improvement in labour productivity, which in turn depends largely on capital formation and capital intensity.

From aggregative targets to sectoral targets—programming approach: Once a set of inter-related aggregative targets is established, the rate of planned increase in national income, investment and employment is known. The problem is to determine how much final output should be produced in order to meet the increased demand arising out of larger income.

If consumers' sovereignty is respected, consistent production targets of principal groups of consumption goods and services can be obtained on the basis of the estimated income-elasticities of demand. This method has been applied to some extent by the Economic Com-

1. See below, pp. 51-53.

mission for Latin America in studies for certain Latin American countries.[1] The application of estimated income-elasticities of demand to the projection of consumers' demand involves a series of assumptions, among which the most important is the absence of changes in distribution of income, distribution of population between town and country, and relative prices. If the programme also involves a change in the income and population distribution, the income-elasticities of demand will be different, but the total final demand can still be estimated, and the production targets can be modified accordingly. It is more difficult to allow for unanticipated changes in relative prices which spring from unplanned changes in production functions, from intervening changes in taste, or from the introduction of new commodities.

The calculation of income-elasticities of demand requires data on consumption for different income groups over a period of years—data which are scanty in most ECAFE countries. This prevents the extensive use of such methods of projection for target-setting. In *The Second Five-Year Plan, A Tentative Framework*[2] some consideration of estimated future demand helped to determine the production targets of certain groups of goods. For instance, in the case of foodgrains it was estimated that with a 20 per cent increase in total consumption—as a result of a 25 per cent increase in the national income—the consumption of foodgrains might increase by some 15 per cent. It was also expected that, as a result of an increase in income, there would be a shift in favour of superior foodgrains and protective goods, though no quantitative projections of such shifts in demand were possible. Production targets were set on the basis of these estimates of demand for principal groups of foodgrains and other food items. Production targets of some major groups of manufactured consumer goods were set in a similar manner.

The application of this method to the setting of production targets is made more complicated when foreign trade is taken into consideration. When domestic production is expected to exceed domestic requirements substantially, the exports of the commodity in question have also to be projected. In this case, a projection of foreign demand is necessary, although this is more difficult since foreign demand as well as conditions of alternative supplies are beyond the planning country's control. When domestic production is short of domestic requirements, the necessary amount of imports has to be estimated. In this connection, the planning authority has to consider not only the various income-elasticities of demand for groups of imports but also the possibility of import substitution in the course of the development programme.

The derivation of targets of capital goods for the fulfilment of the investment target and those of intermediate goods required for the fulfilment of the consumption targets are somewhat less complicated than the targets for the final bill of goods, since no income-elasticities are involved, and the requirements of intermediate and capital goods are determined by technical relationships and coefficients. On the other hand, determination of agricultural and non-agricultural targets in relation to each other involves knowledge and anticipation of complicated economic relationships. The consistency of agricultural output with increases in non-agricultural output involves, in addition to technical relationships and demand elasticities, assumptions concerning agricultural price policy, response by farmers to changes in demand and prices, changes of agricultural self-consumption on farms, etc. The same is true when non-agricultural targets required for increases in agricultural output are considered. Super-imposed on these are the circular relationships of agricultural and non-agricultural targets arising from the input-output matrix.

After the sectoral production targets of final output are set, the next problem before the planners is to determine the various investment projects to fulfil these targets. Once the individual projects are formulated, the total investment requirement will be known by summing up the capital investment requirements of all individual projects.[3] If the total thus arrived at is not equal to the previously determined over-all investment target, then the aggregative targets of investment, income, etc., the sectoral targets, and/or the individual projects have to be adjusted until they are mutually consistent with each other.

The "sectoral approach": Where a relationship between income and demand cannot be well established or where the government wants to modify the consumption pattern, the tool of income-elasticity of demand cannot or will not be used in target-setting. The most conspicuous examples in this connection are educational, health, and other social services. In these cases, the planning authority may set the targets according to certain directives established by the government. Moreover, where data on income-elasticities of demand are not available, the programming approach does not lead to sectoral targets. In such circumstances, the "sectoral approach" may be used; or specific targets may be set from which related targets are then derived.

1. United Nations, *Analysis and Projections of Economic Development* (E/CN.12/363, E/CN.12/364, and E/CN.12/365).
2. *Op. cit.*
3. See section on "Resources budgeting and inter-industry co-ordination".

In this approach, the sectoral production targets may be fixed according to the projection of past trends of consumption or production of individual commodities or broad categories of them. However, an extension of past trends may result in too-low targets and an unchanged pattern of consumption and may thus not represent desired economic development if the previous rate of growth has been too slow. In using past trends for fixing targets, certain subjective modifications have to be made. It may also be that previous trends reflect mainly the results of slow marginal adjustments whereas the development programme may be designed to produce structural changes.

The sectoral approach may also fix arbitrarily the production targets according to desirable consumption levels of various groups of commodities.[1] The production targets of food crops in India (first plan) and in the Philippines were set by this method.

The sectoral targets of final output thus fixed are normally in terms of physical units. Sometimes, they may also be expressed in terms of some factor of production, *e.g.* the target of food crops in terms of acreage of cultivation or the target of meat or milk production in terms of the numbers of livestock required. Once the sectoral production targets of final goods are set, their value (at given prices) can be added up, giving the aggregative target of consumption. It is obvious that while production targets of individual commodities or factors can be in physical terms, targets of aggregates or whole sectors must be in terms of money value, constant prices or stated changes in prices being assumed for this purpose.

Once targets for "strategic" sectors or even for "strategic" commodities have been laid down, related targets can then be derived from the initial targets.

The deficiency of these methods is that they fail to link production targets with effective demand. Thus, it is possible, if the income-elasticity of demand for some food crops happens to be small, that the planned increase in their production may be too large and may result in an undesirable fall in their prices and in the income of the producers unless there is an increased export demand. To some extent, the trend of past imports may indicate the volume of domestic demand which can be met by an increase in domestic production, and production targets may be set with the aim of replacing a certain portion of such imports. This seems to be the basic logic of the Philippine draft programme, except in the case of export crops. However, there seems to be no indication in the Philippine programme of the comparative advantages of various types of production at home and imports from abroad.

Once the sectoral production targets of final goods are set, the next step is to formulate individual investment projects to achieve these targets, which include also projects for producing intermediate goods, energy, and transport services, etc. Sometimes, investment projects are selected based more on some general idea of the "need" of the country than on direct derivation from the targets for the final goods.[2] When these projects are formulated, the aggregative investment target can be arrived at by adding up the investment requirements of these individual projects. This is the method followed in most ECAFE countries; in these countries, the planned projects usually consist partly of a few major and uncompleted projects commenced before the plan period and partly of a number of new projects. When the period required for the completion of a project exceeds the over-all plan period, the part falling within the plan period should be estimated, making possible the summation of investment requirements.

Although the determination of the total amount of investment and its allocation are usually the responsibility of the cabinet, ministry of finance, or planning authority, the sectoral approach alone does not in general provide a balanced development. The ministry of finance or the cabinet may reject certain projects on the basis of insufficient funds, but there is usually no provision to add or substitute other projects.

If a planning authority adopts the "sectoral approach" for fixing consumption and investment targets at both sectoral and aggregate levels, aggregate consumption and investment have to be reconciled by taking into consideration the possible levels of income and the consumption function. It is likely that, in order to avoid undesirable inflation on the one hand and under-utilization of resources on the other, both aggregative and sectoral consumption and investment targets will have to be repeatedly adjusted to each other in order to reach a balance and a satisfactory pattern of investment.

If the planning authority proceeds from the investment end only, by the sectoral approach, then over-all investment has to be balanced with over-all availability of financial resources. In this case the planning authority

1. The desirable *per capita* consumption is multiplied by the population or "equivalent adults" projected at a certain rate of increase, and the result is the total desirable consumption which becomes the target for the country to achieve.

2. The formulation of investment programmes will be discussed in sections on "Determination of development priorities" and "Resources budgeting and inter-industry co-ordination".

has to estimate the saving potential at the projected income levels, taxable capacity, government borrowing capacity, the availability of foreign resources, etc. The balancing of investment and saving involves further adjustments of the income level and sectoral production targets and investment requirements.

Revision of targets: The setting of targets should be matched by a picture of available resources. The resources available at the beginning of the development programme are matters of analysis and fact rather than of target setting. But it is possible to precede the formulation of a development programme with policies to increase available resources to a target level set for the initiation of a programme. The resources expected to be available in the course of the development programme—and as a result of it—can be influenced by policy measures and can therefore become, in a way, a matter for target setting.

An important question arises: should available resources—or resources expected to be available—always determine the magnitude of the development programme, i.e. the over-all investment target? Obviously, this should depend on the definition of "available resources", It will be clear that if existing foreign exchange reserves, the capacity to raise credits abroad, the availability of foreign aid, the expansion of output which may result under inflationary pressure, etc. are all included under "available resources", then output targets are always matched (*ex post*) by available resources, insofar as these targets are in fact achieved. An "excessive programme" would then be defined as one in which the resources have been made available at the undue expense of foreign exchange reserves, resources available to the private sector, future capacity to import, etc.

If, in the course of the implementation of the programme, it is found that certain expected resources are not available or that certain unexpected resources have now become available, then the targets and the programme may have to be revised downward or upward, as the case may be. As such a situation may well occur, especially in countries where statistics are inadequate, agricultural income is fluctuating, and foreign exchange resources are uncertain, it would be better to make the development programme and the targets somewhat flexible. One way of achieving such flexibility may be to plan certain individual projects as marginal projects which can be either added or deleted whenever the circumstances so require. Some of these marginal projects may be labour intensive and some capital intensive, to be included according to the availability of the respective resources. In the Philippines, in almost every sector, proposed projects are classified in three priority groups: highly essential and very urgent, essential and urgent, and essential but not urgent. This helps to make the programme flexible. Viet-Nam also divides the programme into three parts, although on somewhat different principles.[1] Of course, in adding or deleting certain projects from the programme, the planning authority should not overlook the effects on other projects, sectors, or industries. To avoid distortion of the inter-industry balance, the main programme may be kept relatively moderate and supplemented by a few subsidiary programmes, which, well co-ordinated in themselves, may be introduced when additional resources are found to be available.

Value and limitations of models as an aid to planning

The term, model, as used here refers to any analytical framework of the economic system in terms of functional relationships between selected economic variables. Such models can provide a better understanding of the various forces in economic change and some indication of their effects in the future, but they may not always be suitable or useful for exact prediction. There are numerous economic models proposed by economists which range from the simplest, highly aggregated Domar-Harrod model of economic growth to the complicated (disaggregated) Leontief model of input-output relation. The simpler the model, the more it has to proceed at a high level of abstraction and the more it loses in operational value. On the other hand, the more of the operationally important factors the model incorporates, the more difficult it becomes to find statistics to fill the "empty economic boxes" for projection and to compute and solve the equations. This is especially true for under-developed countries.

The Domar-Harrod model of economic growth relates the increase in the national income with capital formation, the marginal propensity to save, and the incremental capital/output ratio in the economy as a whole.[2] Since the variables included refer only to aggregates for the economy as a whole, the model cannot show the interrelation between sectors. It is therefore not meant for demonstrating the structural changes which are very important aspects of the economic development of under-developed countries. However, it

1. Projects to be implemented as soon as possible; projects to be implemented more gradually "as possibilities allow"; and projects to await implementation until completion of the first category. (*Brief Survey of the First Phase of Industrial Equipment*, DPWP. 1/10, paper submitted by the Government of Viet-Nam to the Working Party on Economic Development and Planning.)
2. Let a be the rate of increase in the national income, b the marginal propensity to save, and c be the incremental capital output ratio, then $a=b/c$.

is useful for providing a better understanding of the interrelationship between the over-all targets of income, investment, and saving and for checking the consistency of such targets.

Another simplified model is that in which output is made a function of labour input (man-hours worked), corrected by some assumed or observed increase in man-hour productivity. Such estimates may be made at aggregate levels, at least as a first approximation, as is done in the six-year plan of Japan. Alternatively, labour inputs and increases in productivity can be computed by industries and then aggregated.[1] While, unlike the Domar-Harrod model, this model brings in explicitly the employment factor, it neglects the importance of effective demand generated from consumption, investment, and government expenditure. The dynamic investment factor is relegated to the background, implied as it is in the assumed increase in labour productivity.

A two-sector model may be constructed, *e.g.* dividing the economy into agricultural and non-agricultural sectors.[2] It may be assumed that the agricultural sector has a preponderant share of employment and population but a much lower per capita income than the non-agricultural sector. The rate of economic development may be considered as measured by the speed with which employment and population shifts from the agricultural sector to the non-agricultural sector by way of "industrialization",[3] taking into account the natural increase of population in both sectors. The transfer in question requires capital expenditure, as also does the increase in agricultural production for meeting the demand arising from the increase in population and income. Provision of additional capital is also necessary for the natural increase of population in the non-agricultural sector. Given the incremental capital/output ratio for these three types of activities and the investment required for each of them, the increase in total output and financial requirements for investment can be estimated. The latter have, of course, to be weighed against the availability of financial resources.

This model may be useful not only for indicating economic implications of a transfer of employment and population from the agricultural sector to the non-agricultural sector, but also in serving as a check of the consistency of over-all targets of income, investment, and employment with corresponding targets in these two sectors, provided the relevant capital/output ratios and income-consumption (demand) functions can be estimated. However, the operational value of this model suffers from lumping together all economic activities other than agriculture.

The type of model which at present appears to be most comprehensive is the inter-industry, input-output system. An input-output system set in the framework of linear programming can help to bring home the implications of simultaneous objectives (such as fuller employment, balance of payments equilibrium, achievement of certain rates of growth, etc.) for the allocation of resources between sectors or for the best allocation of scarce factors among competing uses. Although advance in adapting these models to operational use has been rapid, especially in the field of linear programming, and in a number of circumstances, *e.g.* Italy, such models have been found to be operationally helpful, these models still suffer from serious difficulties in application in that they exclude such essential features of development planning as non-constant returns to scale, substitution of factors of production, etc. Attempts can be made to remove some of these weaknesses through the introduction of "shadow prices", but either their determination pushes the difficulties back a further stage (if the shadow prices themselves are determined on the basis of assumed functional relations) or a value judgment enters into the determinants of the model.[4]

It is not intended to list all the economic models here. The models cited above are for the purpose of illustration. No matter how comprehensive, all models are subject to limitations. The parameters and functions assumed in a given model are to a considerable extent influenced by the sociological conditions of the time, so that one cannot rely upon these models for forecasting over reasonably long intervals.

The main value of a model is perhaps that it gives a simplified demonstration of the important functional relationships in the economy, tests the results of different assumptions, and serves as a check list for the development programme. Thus, a model may be helpful in answering the following kinds of questions: What interrelations have to be considered in framing a development programme? How much capital is required for achieving a certain rate of increase in per capita income under the assumption of different rates of population growth? On what types of relationship is statistical knowledge most lacking? What path of growth is suggested by a statistical or an econometric method which to some extent avoids the arbitrariness of judgement?

1. See, for instance, E.E. Hagen and N.B. Kirkpatrick, "The national output at full employment in 1950", *American Economic Review*, September 1944.
2. See, for instance, H. W. Singer, "The mechanics of economic development", *Indian Economic Review*, 1952-53.
3. "Industrialization" is here to be interpreted in a broad sense to include the development of other non-agricultural activities as well as industries proper.
4. Difficulties will also arise from the lack of a clear demarcation between households and industries and between different industries, in many countries of the region.

Aspects of programme formulation

Once the aggregate and sectoral production targets of final goods and services are set, the next problem is to formulate an investment programme, consistent with the manpower and other resources available, for achieving those targets. In any sector, different methods of production, or different ways of combining production factors, may be adopted for achieving a certain production target. The choice of production technique depends mainly on a country's endowment of natural resources, manpower, and capital. Also, targets cannot be set independent of the methods of achieving the targets, since the methods determine the resources required and availability of resources determines feasible targets. Moreover, the development of one sector or one industry will have repercussions on other sectors or industries through inter-industrial demand and supply. In a choice of investment, such repercussions have also to be taken into consideration. An investment programme can be determined finally only after certain investment criteria are also given. Further complications are introduced by the necessity to create a general economic "infrastructure", including "basic investment" or overhead capital not clearly or directly related to specific industries or a specific demand function.

With given resources and with given primary targets and investment criteria, a development programme can be formulated if all the inter-industrial demand and supply relations are known. Where elaborate techniques for deriving these relations cannot be applied, as will be the case in the circumstances prevailing in most ECAFE countries, some other simple technique has to be used in order to foresee possible production bottlenecks, excess capacity, or the accumulation of excessive inventories.

The estimation of import requirements and export possibilities is important for any development programme. If domestic resources are not adequate, additional finance can be obtained only within the limits of what is possible by running down foreign exchange reserves, or by additional external loans or aid, or by a combination of all these measures. The incorporation of external aid in the development programme may prove of special importance in this connexion.

Investment will in most countries in the region be carried out both by the government and by private entrepreneurs. Definition of the precise role of the public and private sectors in a development programme and achievement of mutual stimulation and assistance will entail certain measures of policy as an integral part of a development programme. Just as techniques of production and targets are difficult to separate, so targets and policies are also in practice inseparable.

Determination of development priorities

Criterion of social productivity: Under private enterprise, allocation of factors of production depends on the profit motive, and equalization of marginal private product tends to be achieved if there is perfect competition with factor mobility. The need for development programming and for the modification of choice based on the profit motive arises because the maximization of profit (from a given investment) is not necessarily identical with the maximization of the net social benefit that accrues. The difference arises from possible divergences both in the definition and in the valuation of costs and benefits of development projects. Thus, the development of social or economic overhead capital where immediate direct return cannot be expected has little or no place in the calculations of the private entrepreneur. The formal criterion in the determination of investment allocation is, therefore, the equating of long-run marginal social productivity[1] of investment in different sectors, or, in other words, the maximization of the *total* net increment to the national product wherever accruing, directly or indirectly.

The private profit criterion has the advantage of being more definite and less arbitrary, and may often serve as a starting point to be roughly adjusted for social costs and benefits.[2] Quantitative measurement of the social productivity of any given investment is extremely difficult, and there is, therefore, necessarily an element of judgement involved; in practice, one has to fall back on certain more practical criteria in the determination of investment priorities. It is in these judgments and more practical criteria that the real problem of priorities lies.

Increase in aggregate investment: Special problems arise in determining the *general* priority of investment over more immediate consumption. Because of the very low level of income in most of the ECAFE countries, preference for the present is strong. In addition, there is a large element of uncertainty concerning the future, resulting in high liquidity preference. These factors

1. The term "marginal" is not strictly accurate, since development planning is often concerned with "lumps" of investment, especially where the problem of complementarities is involved; but it is still useful as a concept in emphasizing the need for being aware of opportunities for shifting the allocation of development expenditure. The term "long-run" draws attention to the future reinvestment and growth effects of different patterns of investment.

2. "The relation between costs and returns even in the public sector has to be judged, at least as a first approximation, in terms of market prices". *The First Five-Year Plan*, Planning Commission, Government of India, p. 36.

cause high market rates of interest in many countries, which, together with the difficulty of keeping costs low in the absence of basic public services, tends to prevent large-scale postponement of present consumption for the sake of future consumption. From the point of view of social productivity, therefore, a development programme may use criteria other than the market rate of interest in a choice between present and future. Since the high market rate of interest includes compensation for individual risks and other institutional factors, including risk of inflation, the hypothetical rate of discount applied in the programme (or more normally merely implied in it) may not be much below the natural rate (exclusive of risk premium, etc.), provided the planned total of aggregate investment is not excessive.

However, in many ECAFE countries, it may be neither desirable nor possible to reduce much further the present low consumption level in favour of long-term investment. Such a policy may affect productivity and cause social unrest and may ultimately lead to the failure of the development programme. In these circumstances, the determination of priorities for present investment becomes a less urgent matter than the exploration of means to increase present income and capital formation without sacrificing present consumption. The problem of priorities as between consumption and investment will then concern the disposition of the increment at a later stage only.

Creation of external economies: In an "integrated" development programme, it is one of the most important criteria of investment to take advantage of the interrelationship of different sectors and different industries. This leads to the objective of creating a stronger general basis ("infra-structure") for the economy, by which a variety of investment can be made economically possible. The provision of overhead capital such as transport, communications, and power and the improvement of health and education may lower the cost functions for a large variety of industries and help in creating conditions favourable for industrialization; the difficulty with such investments is that they call for large outlays and frequently take a long time to fructify; the benefits of many of them are, furthermore, intangible and indirect. Yet, such indirect and intangible benefits must be very large wherever the development potential of the economy is also large.

It is not surprising that overhead capital has been given considerable weight in the development plans of countries of this region. In Burma, the Eight-Year K.T.A. Plan allocated 50 per cent of planned expenditure to the creation of public utilities such as transport, communications, and power. The weight of these fields in the national budget is also considerable in mainland China. Emphasis is also placed on such expenditure in the development plans of the Philippines and India (especially in the latter's draft frame for the second Five-Year Plan).

On the other hand, the more priority is given to overhead capital and to the creation of external economies, the less there will be left for directly productive investment to take advantage of these economies. Financially expressed, investment in overhead capital in itself does little to build up taxable and reinvestment capacity for the future. Hence, the argument for giving priority to basic investment is opposed by the desire to take as much advantage as possible of the economies. It has been argued that investment in the "accessories" of development should be kept low in order to shift capital into directly productive projects. To keep a proper balance between the two types of investment represents one of the major priority problems in economic development.

The decision as to determination of priorities between the production of capital goods and consumer goods is, to some extent, interlinked with the creation of external economies. The existence of capital goods industries at home may help in the cumulation of industrial expansion and serve to create external economies for the consumption goods industries. On the other hand, the capital goods industries tend to be capital intensive and, thus, to absorb high shares of available capital if priority is given to them. In countries where the domestic market is limited, there may obviously be no advantage, even in the long run, in establishing heavy industries at home; and even in larger or wealthier countries the social productivity of these industries may only be high enough to justify priority if a fairly long view can be adopted. This therefore leads back to the questions of rates of interest, time periods of planning, and popular willingness to forgo an increase in consumption.

A related criterion of selection is provided by projects which are designed to take advantage of interindustry relations, *e.g.* between industry and agriculture. Such projects include:

(*i*) those which open up possibilities of utilization of domestic raw materials or components which would otherwise remain unutilized, or the production of which can be initiated or increased under favourable conditions. Priority for such projects is reported in the Philippine Republic;

(*ii*) industrial projects which are of particular benefit to farmers, such as production of agricultural tools, fertilizers, insecticides, etc.;

(*iii*) industries resulting in the utilization of waste products previously unutilized;

(*iv*) projects to supply other sectors or industries with productive equipment or to assist them in the better repair, maintenance, or replacement of their capital, *e.g.* engineering industries and services.

(*v*) projects which help to re-vitalize or maintain existing small-scale or handicraft industries, *e.g.* production of pedal-power looms.

Population factors as affecting priorities: A distinction, with reference to priorities, may perhaps be drawn between sparsely and densely populated countries. In general, agricultural investment, including some measure of mechanization, is likely to deserve some priority in the former countries; an initial investment in this direction, provided the necessary capital is available, can raise the productivity of labour and release manpower for industrial investment. In densely populated countries, the labour force necessary for industrialization is already there and often redundant in agriculture; improvement of labour productivity in agriculture by mechanization is less useful, at least in the initial stage, as the labour displaced from agriculture would intensify the unemployment problem. However, increase of income by industrialization raises the demand for food and agricultural raw materials. Under-developed economies starting on the process of industrialization usually cannot afford to import food and agricultural raw materials, so that the raising of agricultural productivity becomes to some extent a necessary accompaniment of industrialization in densely populated countries as well.

Fortunately, the reduction of population density on the land can itself be a step towards greater agricultural productivity, and there are usually possibilities, in view of the present low yields in many countries, of raising agricultural productivity with fairly small doses of investment. At present, yield per acre is generally very low except in Japan and, to some extent, Korea and China, and it is believed that with irrigation and with better techniques of intensive cultivation (without the use of large amounts of capital) significant improvement could be achieved in a relatively short period.[1] Such techniques can be spread through community projects without heavy government expenditure. In densely populated countries, where agricultural improvement can take place without much capital, heavy capital investment may be applied more profitably in industries, at least in the initial stage.

Maximization of employment as a priority criterion: In more densely populated countries projects using surplus manpower for capital formation could have high social productivity. The economic growth of mainland China in recent years is believed to be due mainly to the fuller utilization of surplus manpower with a minimum use of equipment for all types of activity including capital formation. Most ECAFE countries have an abundance of labour and a shortage of capital, and cost-benefit calculations based on social productivity, therefore, may indicate a pattern and technique of investment which economizes the use of capital and maximizes the use of labour. Maximization of employment may thus become a priority criterion, as it may also be a dominating social and political objective. Labour-intensive methods of capital formation are easily applied to the construction of roads, canals, dykes, digging of wells, drainage and land reclamation projects, soil conservation projects, reforestation, etc., which can help in raising productivity (especially of agriculture) without mechanization. In mainland China, and, to a lesser extent, in Burma and India, such projects have been undertaken by unpaid or partly paid labour, which reduces inflationary pressures. Also, the fact that certain sectors or industries tend to be more "capital-intensive" than others should not obscure the possibilities of increasing the degree of labour-intensity, project by project, in all sectors.

Another argument in favour of less capital-intensive methods of production for ECAFE countries is that they allow technology to develop gradually along with the improvement of technical knowledge and of skills in operation and management. Obviously, this course cannot always be followed; in certain cases, the incorporation of the latest techniques of production is of obvious advantage. Thus, for instance, under-developed countries setting up steel mills or petroleum refineries can with advantage borrow the improved production techniques of industrially advanced countries; in certain other directions, however, where savings in capital investment are large and the sacrifice in labour productivity small, a less capital-intensive method may be preferable. Where the capital/labour ratio is low, the output/labour ratio may legitimately be lowered for individual projects.

1. Thus, in India, it is reported that the adoption of the Japanese method of rice cultivation has, in places, increased the yield by some 200 per cent.

In India, the problem of unemployment has been attacked by reserving certain industries for cottage industry or small-scale production.[1] The investment priorities are thus influenced by the primary target of fuller employment. There arises the question how far improvements in productivity ought to be sacrificed to fuller employment. The answer to this dilemma will often lie in reference to the criterion of maximizing total social product, using the marginal productivity of labour (very low or nil where there is a surplus) as a "shadow price" in computing costs and benefits. In many ways, fuller utilization of resources—whether manpower or other resources—has ambivalent effects; while labour-intensive methods may reduce productivity of each unit of labour, total product may be increased because of larger employment. There remain, however, cases where policies dictated by the criterion of fuller employment and the desire to maximize output may not be immediately reconcilable.

There is a possibility that over-emphasis on labour-intensive processes of production, especially when promoted through prolonged government protection or subsidy, may impede the introduction of machinery or the more economic use of manpower even when the time is ripe and render more difficult the progressive subsequent improvement in labour productivity essential to development. The number of workers employed and the aggregate capital invested in these processes may be so large that a change-over into more capital-intensive processes becomes costly; protection or indirect subsidies may have distorted the real cost structure and may hide a comparative disadvantage. A possible solution may be to try to organize production in such a way that it can be mechanized with small alterations, or to organize the division of labour in such a way that mechanization may be introduced stage by stage if necessary.

Low capital/output ratio as a criterion: Quick-maturing projects obviously offer relatively lower capital/output ratios from the immediate point of view, but not necessarily a lower ratio when a longer period is considered. The time element plays a key role in the concept of capital/output ratio used as an investment criterion; generally, it would seem better to consider the ratio over a longer period, although quick-maturing projects have a special advantage where there is a high inflationary potential or where present resources are very scarce.

1. The draft frame for the second five-year plan in India lays down clearly marked fields for expansion of small-scale or hand industries, and where these compete unfavourably with more capital-intensive forms of production (*e.g.* handloom production of cotton cloth competing with mill-made textiles), there is indirect subsidization of hand production by mill production.

Likewise, when applying the criterion of capital/output ratios to specific investment projects or specific sectors, the supplementary benefits of any project to other economic activities should be considered, although these cannot easily be measured. A project with a high capital/output ratio may lower the capital/output ratio for the economy as a whole; obviously, the investment criterion ought to refer to a low over-all capital/output ratio.

In a way, the lowering of the present capital/output ratio conflicts with the creation of a capital base for the economy, which is likely to involve relatively capital-intensive investment (and may also take some time to fructify, thus temporarily raising the capital/output ratio). The balancing of the need for basic investment and the criterion of lowering (*immediately*) the capital/output ratio must depend on the special circumstances in each country, particularly concerning the inflationary potential and the possibilities of raising the marginal savings rate. The availability of foreign resources may also have a considerable bearing on a decision between these two criteria.

The criterion of a low capital/output ratio—for determining investment priorities—is, in practice, also of limited validity where unused (natural and other) resources can only be developed after a heavy initial investment, or where the possibilities of import substitution, which may be necessary for balance of payments reasons, occur chiefly in capital-intensive sectors.

Balance of payments effect: Another criterion in the determination of development priorities is the balance of payments effect of the contemplated investment. Foreign exchange is an extremely important and usually scarce factor, and in development programming, therefore, priority may be given to those projects which economize the use of foreign exchange or increase the supply of it.

In under-developed countries, a more rational utilization of foreign exchange will make it possible to carry out a larger investment programme. Apart from the special advantages of foreign exchange, its present scarcity will often enforce such a priority. The balance of payments effect also has an important time element. Construction precedes operation, and a foreign exchange saving in the construction phase often is bought at the price of greater foreign exchange requirements for operation at a later stage, or vice versa. Obviously, in such circumstances the choice will depend on the availability and requirement of foreign exchange at present and in the future in the context of the development

programme. In addition, there may also be, for different projects, different indirect balance of payments effects from the initial foreign exchange expenditure, different operating effects, and different balance of payments effects from the subsequent changes of income and consumption.

In practice, the foreign exchange criterion in easiest to apply in the case of projects which lead to direct import substitution. In India, the setting up of petroleum refineries is calculated to save a net sum of around Rs 200 to Rs 300 million annually in foreign exchange. In China: Taiwan, the industrial part of the Plan was designed to reduce import requirements by about NT$500 million in 1956 as compared with 1952, thus removing half the 1952 imbalance in external accounts. Where direct export promotion is involved the project has the advantage that the transfer part of the repayment problem created by foreign investment is automatically solved, so that the project is liable to prove attractive to foreign capital and thus lead to an expansion of total available resources.

The foreign exchange criterion reinforces the general presumption arising from inter-industry relations that emphasis should be placed on projects in which the chain reaction of stimulation—through higher demand or through the creation of new production facilities—is kept as much as possible "in the country". This criterion, in its turn, should be balanced by a regard for comparative advantages[1] in the long run, and there are limits to the degree in which a difficult present foreign exchange situation should be allowed to interfere with long-term investment allocations—otherwise a temporarily necessary evil may be elevated to a general principle.

Stability as a priority criterion: In addition, in certain countries projects may claim priority on the ground that they reduce instability. This will apply especially in ECAFE countries such as Ceylon and Malaya which derive a large proportion of their national income from the export of a few primary commodities; these countries may desire to achieve diversification of production largely in order to reduce instability arising from the fluctuations of foreign demand. The extent to which diversification will also contribute to a higher level of income obviously depends on the resource endowment of each country. Even if comparative advantage is in favour of the present concentration of production, there may be a choice between higher but fluctuating income and lower but more stable income. In general, however, diversification in carefully selected directions is likely to be of advantage *per se*. Light industries such as textiles have recently been developed in several countries without much protection.[2] Obviously, diversification of agricultural production will depend on soil, climate, irrigation etc., but in the field of industry development can be more widely stimulated provided there is a market for the product, and the necessary skill for efficient operation. The criterion also applies to countries which wish to establish industries in order to process the food or raw materials previously exported, since more highly processed commodities tend to be less subject to violent price fluctuations.

In addition to the problem of external stability, there is the problem of internal stability as a criterion for determining investment allocations. Internal stability can be promoted by making the economy less dependent on agriculture, which is subject to unpredictable weather conditions, and more generally by diversifying the economy. To some extent, of course, stability and diversification can also be achieved within the field of agriculture; irrigation is a case in point since wet farming is less dependent on the weather than dry farming, and "mixed farming"[3] introduces the possibility of fuller employment as well as diversification within agriculture.

The maintenance of internal stability often means the avoidance of inflation. The pressure of rising incomes on supplies of food and other basic necessities plays a strategic role in causing inflation when a development programme is initiated. Thus, the need to forestall inflation when incomes increase as a result of the development programme would suggest a certain emphasis on food production,[4] food distribution, transport, and the building up of food reserves in areas in which development takes place. Forestalling of inflation further suggests some priority for essential consumer goods and also emphasis on projects with a short gestation period. An emphasis on shorter term or quick-yielding projects may also be justified on certain practical grounds: they minimize risks, they keep resources fluid until it is possible for the economy to take up the latest production techniques, and they make development planning more popular and acceptable.

1. In computing the cost and benefits of development projects which entail foreign exchange earnings or expenditures, actual or official rates of exchange may give misleading results, especially in countries where the local currency is over-valued or where there are multiple rates of exchange.

2. For example, in Hong Kong a number of light industries have been set up successfully over the past few years and the products exported to other countries in Southeast Asia. The new textile industry recently started in Singapore also operates successfully, with products exported to Indonesia, Korea, and other countries.

3. Including the combination of dairy farming and other animal husbandry industries with agriculture.

4. In India, the achievement of food self-sufficiency was made a primary target in the first plan, and a good deal of the increased confidence and accelerated pace of development expenditure in recent years is perhaps to be ascribed to the achievement of this target.

Conclusion: The above-mentioned criteria for the determination of development priorities will obviously sometimes be in conflict with one another. The criterion of the creating of external economies might conflict (for a period) with the criterion of low capital/output ratio, as well as with the balance of payments criterion; the development of rail transport, fuel and power resources are generally capital-intensive and have also a relatively high import content. The total size of the available investment funds also frequently modifies priorities of development. In general, where resources are very scarce and current savings small, heavier investments may sometimes have to be postponed and quick-yielding projects become more attractive; again, where the possibility of imports of capital equipment is severely limited, the pattern of priorities will obviously be different from a situation where there is greater availability of external resources. The priorities accorded in most ECAFE countries appear to indicate that the special resource endowment in this region favours the fuller use of the available manpower for increasing current income and stepping up the rate of capital formation, so that a more rapid pace of development (through capital-intensive projects) may be undertaken more easily in subsequent time-periods.

Resource budgeting and inter-industry co-ordination

The sections on target-setting have dealt primarily with the setting of aggregative targets and production targets of goods which reach the final consumer. The process of production, however, absorbs a large amount of intermediate goods and manpower at various stages. The determination of the requirement and supply of these intermediate goods and services depends primarily on the methods of production used; some of the general criteria of choosing such methods have been dealt with in the immediately preceding section. With given resources and with given primary targets and investment criteria, a detailed development programme (with numerous individual production plans) can be formulated if all the inter-industrial demand and supply relations in the production process are known. In other words, the problem is to secure a distribution of investment such that the demand for intermediate goods is matched at all points of time by the supply of such goods, so that there are no bottlenecks in production owing to an imbalance, either temporary or chronic, in the supply of manpower, raw materials and semi-finished goods, power and transport, etc. On the other hand, it is also necessary to ensure, in order to maximize output, that there are no redundant inventories or capacities.

The input-output approach: For achieving an integrated development programme with well co-ordinated production plans of a number of industries, the most thorough approach is that based on the national input-output concept. Input-output analysis is not limited to intermediate goods only. The output of an industry may consist not only of intermediate goods to be used by another industry as input in its production process but also of goods for final consumption, exports, inventory accumulation, and physical asset formation.[1] On the other hand, the inputs of an industry consist not only of output from other industries, but also of manpower and imports from abroad. In the input-output matrix, the vertical column records the purchases of the industry concerned from other industries and imports, and the horizontal line records the sales of the industry concerned to other industries and for final consumption, export, and investment. The aggregate of total sales equals the aggregate of total purchases.

It is possible from an input-output table based on past records to calculate the total impact of the chain of repercussions from changes in the final demand for a certain product, provided technical relationships between the physical outputs of the different sectors and the physical inputs absorbed by them can be safely projected. If there are goods linked on the demand side to the final product in question, the chain of repercussions arising from the consequential change in demand for all other linked final goods should also be considered. Insofar as the changes in the demand for final goods and services are themselves determined by the production targets, the ultimate impact of all chain repercussions mutually exercised on each other by all industry groups can, with given technical coefficients, be assessed through the input-output table, and the production plans of all industry groups can therefore be formulated within the limits indicated by the input-output table. However, in using such technical relationships, or technical coefficients, certain assumptions have to be made.

First, as the input-output table is expressed in money values and the technical coefficient is a technological (or physical) concept, constant prices have to be assumed. Second, use of technical coefficients based on past data for projecting future demand for intermediate goods implies an absence of change in technology, absence of substitution of one input for another, and constant returns irrespective of the scale of operation. If any one of these conditions is not satisfied, the technical coefficients have to be modified.

1. Capital formation can also be classified by industries and shown in the form of a matrix, if desired.

In actual fact, economic development in underdeveloped countries implies a rapid transformation in methods of production, or rapid technical progress, *e.g.* a change-over from handicraft production of cotton textiles to machine production. Moreover, external as well as internal economies are important in programming for development, and the possibility of external economies is not likely to be consistent with the assumption of constant returns. The substitution of domestic products for imports of certain intermediate goods also changes the coefficients in the input-output table. In short, economic development aims at changing the very technical coefficients which are the basis of input-output analysis in order to achieve a more efficient use of resources and an improvement of labour productivity. Input-output coefficients based on past records, therefore, cannot be taken as a guide-post to the requirements of the new type of production envisaged, especially in countries aiming at rapid development.

For the purpose of projecting future demand for intermediate goods, new technical coefficients may be used. In this connexion, it is interesting to note that the Netherlands has evolved a variant of input-output analysis where flexibility is secured by making use of specialists for different industries to reach a conclusion by a process of discussion on the input-output table for the plan year. In this way, the specialists may incorporate more advanced techniques of production, not necessarily to replace but to supplement the use of past records.

A few countries of the ECAFE region have experimented with input-output analysis during the post-war years. Input-output tables have been constructed in Japan by the Ministry of International Trade and Industry, as well as by the Economic Counsel Board; the former is constructing a fairly detailed transactions matrix of the economy with 200 sectors and another with 40 sectors and has published one with 20 sectors, while the latter has drawn up an input-output table for the economy with 14 sectors. India and Burma have also experimented with this technique on a limited scale.

For most countries of the ECAFE region, however, the technique of input-output analysis appears to be—at least in the immediate future—of doubtful value for planning purposes. To begin with, the technique is useful only if adequate data are available permitting the division of the economy into homogeneous industries or sectors. Japanese experience shows that large professional and financial resources are necessary to make the table of any practical use. The aggregation of a large number of industries into one sector may make the analysis meaningless from the practical point of view. The use of broad national income categories for input-output analysis, for instance, tells little of new significance to planning authorities since these national income categories are, in most cases, aggregates relating to a number of heterogeneous industries. Also, there is an inherent limitation in the notion of the production function based on cost inputs by national income categories—for instance, on this hypothesis, trade margins would have to be regarded as stable technological inputs.

A serious further limitation of the input-output technique for ECAFE countries arises from the relatively smaller importance of inter-industry relations in most countries of the region. In one group of countries this manifests itself in a large export sector or in a dependence for many consumption goods and other articles on imports, while in other countries it takes the form of a large subsistence sector outside the market mechanism.

If a full-scale application of the technique of input-output analysis appears, therefore, to be of rather limited significance for planning in countries of the ECAFE region, how then can sectoral investment and production plans be formulated and how can inter-industry co-ordination be best secured? How, that is to say, can investment be planned so that there is, in the first place, always demand for newly created output and, secondly, no bottleneck or shortage either of intermediate goods or of final goods? Simpler methods have to be found.

The project approach: In many ECAFE countries which have development plans, the plans start from the aggregation of individual projects being undertaken, or to be undertaken, by individual ministries or departments. Such individual project plans contain the estimated requirements of capital equipment, raw materials, semi-finished goods, skilled labour, unskilled labour, etc. They also usually contain an estimate of what can be domestically supplied and what has to be imported. The estimates are usually made by the technical staff of the ministries or departments concerned, and they imply the use of certain technical coefficients of production. These coefficients may be based on engineering data derived from past performance, and where such data are lacking or are inadequate, or where techniques are to be improved, coefficients may be taken over from more developed economies (from which technology is to be imported).

However, a summation by commodities of all these requirements in all the proposed projects does not give the final result. This is so because when the total investment requirement is weighed against available

resources, some proposed projects may have to be dropped. The total investment and its allocation among various ministries or various fields of economic activity also determine the extent of the inclusion of individual projects in the plan. The ministries and departments concerned usually list their projects according to their own predetermined priorities. For instance, in the Philippines, power projects are listed according to their capital/output ratios. Once the total fund available for power development is determined, some power projects with high capital/output ratios which cannot be covered by the available funds are dropped.

Once the selection of projects in each individual sector is determined, material requirements can then be determined and aggregated by commodities. In their turn, the secondary effects of increased material production must be taken into account somehow. However, these requirements are only confined to the public sector, and therefore the aggregate does not give total requirements for the whole economy during a given period. In order to make the picture complete, the requirements of the private sector have to be estimated.

The estimation of the material requirements of the private sector involves the forecasting of future demand and the assumption of investment incentives. However, such forecasting cannot be based on the increase of gross national product alone. The production process utilizes a considerable quantity of intermediate goods the demand for which is only indirectly affected by changes in real income. For those intermediate goods which are used exclusively for making one final product, demand may move very closely with the demand for the final product in question, provided no basic technological changes take place. "For example, by observing the evolution of real income it is possible to forecast the demand for pulp required in paper manufacture almost as accurately as the demand for paper itself."[1] However, when an intermediate product is required for a multiplicity of final products, such aggregate projection would be much more complicated and subject to a large margin of error, not only because technological changes may be happening simultaneously in many fields, but also because of the more complicated change in the composition of the gross national product.

In practice, however, such a task of estimation would be tremendous and insurmountable for a limited staff. Moreover, it may not be necessary for a country to make such estimates for non-strategic commodities or commodities in abundant supply. In an open economy, bottlenecks in production can be broken by timely imports. The price mechanism may also be used to adjust demand and supply. Therefore, some countries of the region use a "commodity balance" approach which implies the drawing up of budgets for as many strategic commodities as is practicable and the ensuring of their mutual consistency. Commodity budgets are an essential part of the planning mechanism in the USSR and Norway and, during the post-war years, such budgeting has been a feature of British economic policy, as, for instance, in the matter of coal.

Within the ECAFE region, one area where commodity budgeting seems very comprehensive is mainland China. Based on the reports of the various ministries which control the state enterprises, the State Planning Commission estimates the needs of the nation for various intermediate goods such as coal, electric power, cement, steel, etc. and the possibilities of expanding their production. The two estimates are checked with each other and revised to achieve balance. Then the revised estimates for consumption are sent to the consuming units of these products and the estimates for production are sent to the producing units through the respective ministries. If it is found that expansion of a certain product is not possible or possible only by additional capital investment, these facts are brought to the attention of the State Planning Commission which makes the necessary adjustments. The adjusted estimates are again sent through the ministries to the units consuming and producing the material for further consideration. This procedure may be repeated many times before the programme is finalized.

In the draft plan frame for the second five-year plan in India, a rough attempt is reported to have been made to check on the consistency of the plan frame by the method of "commodity balances" in respect of some of the more important commodities, that is, the outputs of major industries are matched by the input requirements of all other (known) industries and by consumption, so that the investment and raw material requirements of any one industry are met by the outputs of all other industries (allowance being made, of course, for external trade). Thus, the input requirements for production and the full utilization of the more important commodities are simultaneously assured. In China: Taiwan also, coal, cement, power, gasoline, and irrigation water, among others, are subject to end-use budgeting under the auspices of the Economic Stabilization Board.

1. *Analyses and projections of economic development, I. An Introduction to the Techniques of Programming*, United Nations, E/CN. 12/363, p. 332.

In a way, the budgeting of important scarce commodities indicates priorities for development. In the first place, such budgeting of scarce commodities helps to ensure that the development programme is kept within the limits of available resources. Secondly, a scarce-commodity budget, *e.g.* a steel budget, may serve to determine the priorities in the use of steel as between conflicting uses. Finally, scarcity of a strategic commodity may lead to revisions in the priorities of the development programme in order to improve the supply of the commodity in question or to economize its use. Where a commodity budget leads to the sloughing off of some investment projects, again the question of priorities comes up, since a decision has to be made as to which projects should be deleted.

It may be noted that while in a sense an input-output approach amounts to commodity budgeting on a large scale, the table itself does not provide a scheme of priorities, although priority may be introduced by special manipulation. A scheme of priorities can always, on the other hand, be applied to the partial approach of individual commodity budgets.

The possibility of import lends some flexibility to commodity budgets, and, obviously, import possibilities and programmes need to be co-ordinated with the drawing up of scarce commodity budgets.

Budgeting of scarce commodities is probably the simplest technique for securing the best allocation of scarce resources necessary for development. It has been seen earlier that, in promoting rapid development, not only the rate of capital formation but also the pattern of investment is a significant determinant. The drawing up of commodity budgets for, say, steel, cement, and power (coal and electricity) represents the minimum of policy measures necessary for channelling these resources into the desired pattern of investment.

Manpower budgeting: General manpower budgeting, in the sense in which the term is understood in in Western European countries, is no problem in most countries of the ECAFE region, where there is usually a surplus of manpower rather than an acute shortage of it. The problem is mainly one of how to utilize unemployed labour, seasonal or otherwise. Yet, manpower budgeting is still applicable in these countries. First, there is the problem of planning the occupational redistribution of the working population, and, secondly, there is need for budgeting scarce resources of skilled manpower and technical personnel.

In many countries of the ECAFE region, the shortage of skilled manpower is at least as important as the shortage of capital. Budgeting for skilled manpower has three aspects. It is necessary in the first place to estimate the demand for skilled personnel; secondly, to plan the supply of skilled personnel through educational and training programmes; and, thirdly, it may be necessary to adjust development plans and techniques to take account of the availability or non-availability of skilled personnel.

The problem of estimating the necessary skills for executing a plan of development is relatively easy where development planning is essentially a collection of certain projects of investment. It is also possible to estimate the demand for technicians and managerial personnel where the total investment allocations in the community are clearly laid down. The problem is more difficult where investment decisions are to a large extent left to private enterprise, and the state is concerned more generally with the creation of investment opportunities through the provision of social and economic overheads and with the necessary training that must accompany the desired investment in given industries.

Partial budgeting of manpower of the type indicated above is illustrated by the technique used by planners in India in the formulation of the draft plan frame for the second five-year plan. After the pattern of expenditure was given and the industrial breakdown of investment tentatively decided, requirements of skilled personnel for carrying through the programme of industrial investment were broadly estimated on the basis of similar requirements in existing industries or projects.

Such co-ordination between investment plans and the requirements of skilled personnel makes possible *inter alia* a rational allocation of funds between physical asset formation and "capital-like" expenditures on education and training and the building up of technical knowledge.

Co-ordination between two broad sectors—agriculture and industry: There is generally a certain limit to the demand for agricultural products as incomes increase. At higher levels of income a smaller proportion is spent on food and a larger proportion on manufactured products, though the latter may still require agricultural raw materials. Economic development has therefore come to be regarded as synonymous with industrialization in the broad sense, or a relative redistribution of the working population away from agriculture. In programming for economic development, a redistribution of the occupation pattern thus becomes something of an

objective. A convenient yet ambitious target, adopted in a number of countries, is to hold constant the number of persons engaged in agriculture and to allow the increases in population to filter through to industrial employment.

On the other hand, if three-fourths of the population is in agriculture, an increase in agricultural income is necessary to finance the industrial development, and at the same time manpower has to be released from agriculture. Accordingly, an increase in the productivity of agriculture is a pre-condition for the development of countries of this region. If the necessary amount of food can be produced by fewer people, labour will be available for transfer from agriculture to industry and other sectors. Hence, there is a need for creating new employment opportunities outside agriculture.

The proportion in which marginal income is spent on food and manufactured products is, therefore, obviously of great importance in development planning. An estimate of the need for agricultural production also requires knowledge of the raw materials coefficients of the various manufactured goods which are likely to be in demand. From these two sources, the increased demand for food and the increased demand for agricultural raw materials, it should be possible—after making due allowance for foreign trade factors—to plan for agricultural production, separately for food and agricultural raw materials. Together with the likely increase in labour productivity in agriculture, the relatively smaller targeted increase in agricultural production will call for the planned redistribution of the population among agriculture, industry, and other sectors.

Indonesia has, for some time past, attempted a solution of the overcrowding of agriculture in Java by a transmigration of the agricultural population to Sumatra and to some of the outer islands. Such an operation may be deemed to be successful as a developmental policy only insofar as it starts a development process in the sparsely populated areas, or if the increase in productivity per worker is used either for displacing food imports when foreign exchange resources are inadequate (thus making possible imports of capital goods instead), or for planning a transfer of labour from agriculture to capital construction. In this sense, the population transfer policy in Indonesia may be regarded as a preliminary to development—as creating the most favourable opportunities for raising agricultural efficiency. In planning for an occupational redistribution of population, therefore, there is—unless conditions for movement are especially favourable—need for minimizing geographical redistribution by encouraging rural industries, rural public works, etc.

In over-populated countries, a special problem arises in the transfer of population from agriculture to industry; while such a transfer—with or without reorganization in agricultural techniques—might be achieved without reducing food production, there arises a separate problem of food transfer. Even if food production is maintained, it does not follow that food will be available to the workers transferred to industry or other (non-agricultural) occupations. The problems arising here are obviously less quantitative and more institutional in nature and require a great deal of judgement and knowledge of incentives. The "backward sloping supply curve" in agriculture is a useful concept, but statistics are not available in many countries to allow quantitative estimation of the actual slope of the curve. Perhaps the price system can partly alter the shape of the supply curve, but there may also be a question of providing the right type of manufactured goods to farmers and of institutional changes transforming non-market economies into money economies.

Location of industries: The problem of inter-industry co-ordination has yet another aspect, that of geographical balance. This is the problem of location of industries, in which account has to be taken not only of the economic costs of location, such as availabilities of raw materials and proximity to markets, but such general considerations as the need to avoid rapid or large-scale transfer of population from one part of the country to another. To a large extent, therefore, the advantages of any location for the development of particular industries may have to be balanced by such considerations as the social cost of over-crowding as well as the investment in overhead capital necessary for urbanization.[1]

In many countries, also, the purely economic considerations may have to be modified for the sake of development of backward pockets or geographical areas, or, in other words, the principle of maximum economic advantage may have to be changed into a concept of maximum social welfare. The presence of backward areas in a country may act as a drag on the rest of the economy, and generate instability. For this and other reasons, just as there is special need for development of the under-developed countries in the world, so countries with a development programme may need to give special preference to backward pockets for industrial expansion.

1. This topic is expected to be considered at the Joint UN/UNESCO Seminar on Urbanization in the ECAFE Region to be held in Bangkok in August 1956.

Foreign Exchange Budgeting

The importance of foreign exchange in the context of development programming is in its versatility: it makes possible the import of goods and services not produced at home, in the form of capital equipment, raw materials, technical experts, etc. necessary for development; it helps remove bottlenecks in production; and it is helpful also in checking inflation when unforeseen difficulties, *e.g.* through a crop failure, arise. As most ECAFE countries do not produce the machinery and equipment necessary for rapid expansion of production, the availability of foreign exchange resources is a basic requirement of development, and where the full utilization of domestic resources is only possible through imports of indispensable capital goods the rate of domestic investment also comes to be governed by the foreign exchange component.

Foreign exchange tends to be, therefore, the most important scarce factor for virtually all under-developed economies, because of the increasing need for imports—both of capital equipment and consumption goods—to meet the requirements of development, combined with the difficulty (for most ECAFE countries) of expanding exports in the near future. In most countries of the region, the existing level of foreign exchange holdings is not such as to permit any considerable import surpluses over the coming years; in fact, there is need, in a number of ECAFE countries, for reducing imports from their present level in order to balance the external payments. It is very important, therefore, not only to make the best possible use of the available foreign exchange resources, but to assess correctly the likely future availabilities of such resources so as to avoid bottlenecks.

The budgeting of foreign exchange—for the formulation of a development programme—is a three-stage process: the forecasting of the supply of foreign exchange over the future, the estimation of the requirements of foreign exchange both for "normal" imports and for imports needed as a result of the development programme, and, finally, the adjustment of the development programme so as to balance the foreign exchange budget and to direct foreign exchange resources into the most essential uses. A special problem, in this connection, arises from the incorporation of external assistance into the development programme when the assistance is given in specific forms.

Forecasting supply of foreign exchange: The estimation of the likely availability of foreign exchange over a period of years is a complicated and difficult job, involving as it does the estimation of possible domestic production and world demand for a country's exports. Most ECAFE countries depend, for their foreign exchange earnings, on the export of a few primary commodities which have, in the past, been subject to wide fluctuations in world demand. The forecasting of commodity exports has to be made in the light not only of the past and projected future trends in foreign demand and supply conditions, including the development of substitutes in other countries as well as the trend of world prices, but also in the light of the export industries to be promoted in the development programme (in turn formulated in accordance with export possibilities). In addition, it is necessary to forecast the receipts of "invisibles", as well as likely receipts of foreign investment capital, taking into consideration government policies to attract foreign capital, receipts of foreign loans, both from governments or international agencies and private, and external assistance on a grant basis. Each of these receipts is subject to fluctuation and uncertainty.

While domestic and export demand for certain commodities may be projected from income, the uncertainty of demand is large for articles such as tin and rubber, the fluctuations in the demand for which may be independent of the income level. There is also the problem of the development of substitutes and of the export development programmes of other countries. Labour-consuming and refined statistical tools may not be very appropriate in the ECAFE region, where the limited number of trained persons available will usually be more urgently required for other types of economic analysis. Simpler projections of the quantity of exports —together with estimated prices, determined on the basis of likely trends—may, therefore, have to be adopted.

The estimate of the supply of foreign exchange, made for the formulation of the tentative framework of the second five-year plan in India, proceeded on fairly simple techniques. Commodity exports were divided into 17 principal commodities (or groups of commodities), the overall value of merchandise exports over the five-year period being assumed to be at the same annual rate as in 1953/54. In deriving these individual estimates, past trends of the quantities and values of exports were taken into account, together with such considerations as, say, the maximum export quota (under international agreement) for tea, domestic export policies, etc. Current receipts for "invisibles" were also projected for each item of receipt.

One way in which the errors of forecasting may be minimized is through a preliminary sorting of (*a*) items of receipts which, in the past, have shown relative

stability, as against those which have shown instability (the latter grouped by degree of instability), and (*b*) items of receipts the increase of which is part of the projected development programme, *i.e.* items backed by certain policy measures, as against those which depend entirely on external demand factors.

Forecasting demand for foreign exchange: In general, forecasting the demand for foreign exchange[1] is easier than forecasting supply, partly because the former is to a greater extent subject to domestic policies. In countries with exchange controls or substantial external aid, specific "import programmes" may be formulated to serve as a basis for estimating foreign exchange requirements. The estimate of the need for commodity and service imports may be arrived at in two stages: (*a*) an estimate of the direct import requirements of various investment projects in the development programme, and (*b*) an estimate of the further import requirements to meet the more general domestic demand for foreign goods and services, taking into consideration import substitutes developed during the programme period and other changes in demand arising from the development programme.

In theory, the direct foreign exchange requirements of projects included in the development programme are capable of reasonably correct forecasting, mainly on the basis of import components estimated from past experience. In practice, detailed project planning does not usually take place at the time of formulating the programme, and therefore only a rough estimate of the foreign exchange requirements can be made at that time.[2] More accurate estimates may, however, be made for the exchange requirements of the current year once details for individual projects are formulated. The uncertainty of demand for imports by the private sector and for stocks of course increases the difficulty of making correct estimates.

Although the secondary effects of a development programme on the demand for imports are more difficult to estimate, nevertheless, since imports are subject to government regulation and since there is often an obvious need for some time to keep imports down to a minimum, it is necessary to make an approximate assessment of the implied demand for foreign exchange, except for unforeseeable circumstances like the serious crop failure in India and Pakistan in 1952.

In the Philippine draft programme, aggregate imports have been projected on the basis of the expected increase in population, that is, by positing a constant volume of import *per capita;* direct requirements for specific sectors have been independently estimated. In India, for the tentative framework of the second five-year plan, import requirements were estimated for machinery, metals, and vehicles separately and for 16 other major import commodities and commodity groups.[3]

Adjustment of plans to balance foreign exchange budget: In a number of countries, the balancing of foreign exchange receipts and payments is treated as something of an objective or aim of policy. In Japan at the end of the war, in India in 1948, in Indonesia for some time past, and in Burma at present the balancing of external receipts and payments has been one of the most important objectives of policy. Where there is a fundamental (or even an acute temporary) imbalance in external receipts and payments, the very nature of a development programme may have to be modified; in other instances, the pattern of priorities may to a large extent be determined by the foreign exchange situation. For example, tightness of foreign exchange may enforce concentration on more immediate objectives. Where foreign exchange availabilities are seriously limited, the allocation of domestic production factors will clearly be different from a situation where no such problem is present. The emphasis on projects earning or saving foreign exchange, the policy towards attracting external capital, and, in fact, the extent to which a development programme may be formulated in excess of currently available (or foreseeable) domestic financial resources—these may all centre around the foreign exchange reserves and balance of payments prospects of a country. Where the foreign exchange supply has been uncertain, countries may try to formulate development programmes on a modest scale, with supplementary programmes (or specific projects) to be undertaken in the event of greater foreign exchange availabilities.[4] In India, during the first five-year plan, the

1. In this connexion, a few numerical illustrations for the ECAFE region have been worked out in the *Report and Documents of the Second Working Party of Experts on the Mobilization of Domestic Capital, 1953, p. 285,* on the basis of assumed values of some of the determining variables.

2. Thus, in the initial Colombo Plan Conference the foreign exchange component of investment programmed for by the various participating countries was only vaguely estimated, on a rough-and-ready basis; in fact, the direct foreign exchange requirements of the various programmes of development have proved to be much smaller than was originally supposed, although foreign exchange requirements outside the programmes have been considerably higher than originally estimated.

3. For machinery, metals, and vehicles, imports have been posited at an annual rate of around 233 per cent of the value of imports in 1953-54; this was, however, simply on the basis of the size of the investment expenditure on industry, transport, and communications and was not based on calculation of the actual requirements of foreign exchange for the various projects to be included in the second plan. For other imports, the possibilities of import substitution, *e.g.* in the matter of foodgrains, as well as the need for higher imports of certain industrial raw materials, were taken into consideration in the estimation of import requirements. It is stated, however, that a more accurate forecast will be made when the projects have been worked out in detail; at present the plan is in a draft stage and gives merely some broad magnitudes relating to the pattern of expenditure.

4. Cf. "Methods of target setting", *supra,* p. 35.

plan targets were set somewhat higher than it was then believed domestic resource availabilities would warrant. Theoretically this procedure might have been risky, since no clear-cut priorities were laid down for lowering the level of investment in the contingency of lower availabilities of external resources.[1]

Incorporation of external assistance in the development programmes

For most ECAFE countries aiming at rapid development, dependence on external assistance—both technical and financial—is likely to be substantial for a considerable length of time. The adequacy and steadiness of the flow of external assistance will, therefore, have an important bearing on the formulation of development programmes in this region.

Assistance for specific projects: The specific project approach has been widespread in international financial assistance. In the ECAFE region, under the Colombo Plan arrangements, bilateral aid is generally extended to projects accorded priority in the development programmes of the receiving country and requiring such equipment and goods or technical assistance as can be supplied by the donor country. Aid in the form of "commodities" is, however, often given on a more general basis. The prevailing practice of the International Bank and the US Export-Import Bank has been to channel their loans to specific productive projects. Receiving countries also sometimes prefer the project method because it puts the relations with lender or donor on a clear-cut and limited basis.

While the tendency of lending countries, and to some extent of receiving countries, to tie assistance to specific projects is understandable and while this may ensure the productive use of such funds, it does not guarantee that domestic resources will not, as a result, be shifted to less essential or less productive purposes. What is really needed from the point of view of a major effort to achieve greater economic development is to ensure the proper utilization of all the resources at the disposal of a country; this entails that the specific projects financed through external assistance should form part of an integrated development programme.[2]

The tying of external assistance to specific projects may obscure the fact that such assistance may be needed not so much for financing certain projects as for raising the rate of domestic capital formation and for the removal of limitations which hold back the development of a country. On the other hand, the emphasis on specific project assistance carries with it the advantage that it facilitates the channelling of technical assistance to the project concerned, thereby integrating financial assistance with technical assistance. This form of assistance may also help in the creation of psychological ties between the contributing and receiving country, *e.g.* by demonstration of the value of the project to the people and taxpayers of the assisting country. Where substantial aid is actually likely to be available on a more general basis, i.e. for financing agreed import programmes, the major problems of reliance on external aid at the present time relate to the uncertainty of aid—in respect of volume over a longer period and in respect of the timing of the availabilities of aid.

Incorporation of assisted projects in general programmes: While the project approach has wide application in the field of external assistance, several procedures have been evolved to ensure that projects chosen for external participation fit into the development plans of the assisted countries. Such a procedure embraces two operations: (*a*) project submission and (*b*) formulation of project tests and finalization of project choice. Under the Colombo Plan, the receiving governments put forward a number of projects for possible external participation, and it is expected that the place of each programme in the long-term development programme will be clearly indicated. In practice, the Colombo Plan operations are quite simple; the participating countries are at liberty to propose any projects envisaged in their development programmes. The contributing country selects those in which it can effectively participate and endeavours to supply needed equipment and services as well as technical assistance. The flexibility and informality of the Colombo Plan is demonstrated by the agreement reached among the participating countries that it was neither necessary nor useful to make technical and statistical adjustments in development plans. Rather, the emphasis shifted to the idea of a periodic review and assessment of what had generally been accomplished in the preceding year and the evaluation of problems for the foreseeable period ahead, with the purpose of securing whatever aid the assisting countries might be in a position to afford. Such organizational

1. In the event, both plan expenditures and resource availabilities fell short of the target, the former owing largely to the inadequacy of organization necessary for implementing the plan. Hence, there was no problem of either inflation or choice between marginal projects where no such distinction had been made originally.
2. In the allocation of European Recovery Programme aid during the post-war years, this principle was strictly followed; in an examination of the aid requirements of any country for any year, the following considerations were taken into account:—
   (*a*) that the annual programme (and the resultant capital import programme) should be consistent with the long-term programme;
   (*b*) that the raw material import programme should be consistent with the agricultural and industrial programmes; and
   (*c*) that, apart from exceptional cases, the food import programme should not provide for increased consumption over a given level.

flexibility imparts operational flexibility and helps in the integration of assistance into the changing pattern of needs of the assisted countries.[1]

A major problem in the incorporation of external assistance arises from the uncertainty of the size as well as the timing of the assistance. The problem could be solved if the size of external assistance over a period of years could be agreed upon between assisting and assisted countries. This would enable more precise foreign exchange budgeting and would lead to a qualitative improvement in the development programme. Constitutional requirements of annual appropriations, however, raise difficulties here, although these are not perhaps insuperable once mutually acceptable arrangements have emerged. The present uncertainty of external aid could theoretically also be adjusted to some extent by programming for more than one possible rate of development as already emphasized in connexion with the discussions on target setting and foreign exchange budgeting—in other words, by formulating more than one development programme and then operating with the one that is consistent with the actual level of resource availabilities.[2]

Assistance to cover foreign exchange requirements of projects: Schemes of external assistance are often limited to the provision of the direct foreign exchange requirement of a given project. Both the International Bank and the US Export-Import Bank generally lend only a part of the amount required for a project, and, in the normal case, their loans can cover only the direct foreign exchange expenditure incurred. Thus both the internal cost of the project and the indirect impact of the programme on the balance of payments position of the country will usually have to be met from the resources of the country assisted. The participation of the assisted country—usually a preponderant participation—is thereby assured in the case of each of the projects assisted. This, of course, implies that domestic resources for the implementation of the project are available and that lack of foreign exchange is the only bottleneck restricting the programme.

External aid on this basis fails to do full justice to situation in which there is a deficiency of total resources in relation to needs. In the ECAFE region, under the Colombo Plan, there was generally no stipulation to the effect that assistance was to be confined to the direct foreign exchange costs of specific projects. Similarly, a number of US bilateral aid programmes to the region have supplied not only technical assistance and some capital equipment for development purposes but also commodities (including food items) the sale of which in the recipient country has provided the recipient government with funds for meeting some of the local currency costs of projects. This general form of aid is especially advantageous in view of the need for development of overhead capital in the ECAFE region; these projects by their very nature require predominently domestic factors of production, and the foreign exchange requirements of such projects may be comparatively small. Another disadvantage of limiting assistance to foreign exchange requirements of a project is that it may lead countries to put forward projects with a high foreign exchange requirement, irrespective of their status in the scale in priorities in the development programme. This may distort the investment pattern. Aid in the form of commodities is also more capable of rapid utilization, and this may be important where aid is annually accounted and reconsidered.

Aid in the form of consumption goods: Imports of consumption goods, in the context of a vigorous domestic investment policy, may be a useful form of external assistance. A special problem in this connexion relates to the use of agricultural surplus commodities for financing economic development in this region. The possibility of such external assistance was recently explored in a pilot study in India conducted by FAO. In general, it was found that these surpluses can do most good if two basic conditions are satisfied:

(*a*) the surpluses must lead to additional development, not otherwise possible in spite of the country's own maximum efforts, owing to lack of sufficient resources of skilled manpower and finance;

(*b*) the new projects using the surpluses must expand the domestic consumption of food to the full extent of the added supply, so that there is no depressing effect on either domestic or international prices.

As noted, under the Colombo Plan bilateral assistance has taken the form of consumer goods (mostly in the form of food) as well as capital goods. In the ECAFE region, however, a number of countries have food surpluses rather than a food deficit, and it is difficult to state to what extent such countries would be affected—through impairment of their ability to export more food—if food surpluses from outside the region were made available to other countries.

1. Thus, emergency situations like the famine in India during 1952 and the unforeseen food shortage in Pakistan in the same year meant that aid had to be in the direction of provision of foodstuffs rather than the supply of capital equipment.

2. But this procedure as already noted raises serious problems concerning the availability of trained staff and the multiple claims on their services.

Counterpart funds: The creation of counterpart funds has been an established part of the technique of integrating external assistance with the development plans of receiving countries. These funds arise from a requirement that an assisted country deposit local currency to the extent of all or most of the value of external assistance. Where such sales take place, this local currency represents the sales proceeds of goods and services received. These funds are deposited into a special account, releases from which are authorized by agreement between the assisting and the assisted country. The general principle is that counterpart funds are to be used for the achievement of the objectives of the development programme of the receiving country. In certain cases, however, these funds have been used to offset inflationary pressures rather than finance further development and have been subsequently retired in one way or another. Where aid is mainly in the form of equipment for general government programmes of public health, transport, and agricultural extension services and thus does not result in sales to the public, the setting up of counterpart funds may to some extent strain the budget of the assisted country.

Counterpart funds have also been used by governments of assisted countries as a mechanism for the mobilization of domestic private capital. For instance, the counterpart funds generated by the United States commodity assistance to India were used as rupee capital for the government-supported Industrial Credit and Investment Corporation.

Counterpart funds are in effect no more than the financial counterpart of extra imports. The use of counterpart funds, as distinct from the use of foreign assistance as such, does not connote the availability of physical goods and services freshly available for allocation. What it does mean is that, through its control of the additional imports, the recipient government has an additional command over resources vis-a-vis the rest of the community. If these funds are used for the promotion of investment, as is generally done in the case of the Colombo Plan, for example, their impact on the finances of the country will depend on whether inflationary or non-inflationary conditions are present or whether idle resources exist.

Administrative problems: The administrative problem of integrating external assistance with the development needs of the receiving country has a number of facets:

(*a*) the immediate problem of working out the administrative details of programmes and projects chosen for external participation, if aid is granted for specific projects, including arrangements for authorization, procurement, and end-use supervision;

(*b*) the problem of co-ordination between operations of the assisting agency and national development operations, including arrangements for the timing and release of funds, arrangements for the linking of supplies with need, etc.; and

(*c*) the continuing problem of maintaining consultative machinery to meet the problems that arise in the course of external assistance operations, and to meet unforeseen needs or bottlenecks which may arise (*e.g.* difficulties in implementation due to supply scarcities, or shipping difficulties, etc.).

The United Nations technical assistance programme as well as the US Government aid programmes have moved in the direction of setting up a separate organization for dealing with the problems that arise in the administration of assistance. The Colombo Plan, however, has not so far envisaged the setting up of a permanent administrative organization. Since assistance is on a bilateral basis, the problem of administrative integration arises between the particular country assisted and the contributing country. The consultative committee of the Colombo Plan provides a multipartite form for discussion at the ministerial and secretarial levels and the Council for Technical Co-operation acts as a clearing house in the flow of technical assistance. On the country level, various governments have established an administrative unit to tackle the problems connected with external assistance. Thus, for instance, in Australia the government has established an Economic and Technical Section with a special Director of Colombo Plan Supplies in the Department of External Affairs; in India, a Foreign Aid Division (formerly the Technical Assistance Unit) has been set up within the Ministry of Finance to take care of problems arising in the incorporation of assistance, and the government has also appointed a resident representative in Nepal to provide liaison in respect of aid rendered by India to that country.

Technical assistance: The preceding parts of this section have dealt with the incorporation of external financial assistance in the development programme. Some special problems arise when external assistance

consists of technical assistance divorced from immediate financial assistance. In the United Nations programme, the trend is towards integrating technical assistance programmes with the development plan of the country ("country programming"), through the machinery of continuous consultation between the government and the TAB representative. The intention is for the technical assistance programme itself to reflect some of the objectives and priorities of the country and to help to affect the determinants of economic growth in a favourable direction. In view of the small size of technical assistance programmes in relation to the total development programme of a country, the technical assistance programme will not be a small-scale replica of the development programme but will "fill in gaps". Thus, the real test of the successful incorporation of technical assistance from abroad would not be any notion of balance within the technical assistance programme itself, but rather in the relationship of the technical assistance programme to the development programme.

A special problem in relation to technical assistance is how far multilateral or bilateral technical assistance can help in the formulation of the development programme itself, *e.g.* by the training of planning staff, assistance with the technical work involved, communication of experience of other countries, and economic analysis leading to suggested priorities or sectoral allocation.

Co-ordination of public and private investment

There is a great need for co-ordinating public and private investment; otherwise, in their expansion, the public and private sectors might compete for scarce resources, both physical and financial, thus tending to create bottlenecks. As it happens, since certain basic development can only be undertaken by the state and certain intermediate products required by public enterprises can usually be best supplied by private producers, there is obvious scope for complementary development of the public and private sectors.

The problem of co-ordination of public and private investment has three facets: first, there is the problem of demarcating the specific fields or directions of investment for the two sectors respectively; next arises the problem (for the planning authority) of making realistic forecasts relating to the private sector; and, finally, there is the problem of devising appropriate policies to help in the fulfilment of private sector plans and targets.

Demarcating public and private sectors: Owing to the shortage of domestic private capital and entrepreneurial initiative, public investment has been the key factor in development planning in a number of ECAFE countries. In Burma, for instance, nearly 60 per cent of the total estimated development expenditures are in the public sector; in India also, the role played by government capital formation is great, and, if allowance is made for "capital-like" development expenditures, most new investment can be said to be the responsibility of the State. In other countries like Pakistan and the Philippines, on the other hand, the private sector has been assigned a more important role; in the latter country, about 60 per cent of the total investment is expected to be forthcoming from the private sector. In Ceylon, there is a trend toward a widening of the private sector. By and large, however, owing to the urgent need for basic development of economic and social overhead capital in most ECAFE countries, it is practically certain that government investment will everywhere play an extremely important part—very likely an increasingly important one for some time to come in the majority of cases.

The demarcation of the respective fields for public and private enterprises naturally depends on the special circumstances of each country. On the one side, there is mainland China where all mines, transport, banking, foreign trade, and most factory industries and wholesale trade are public enterprises; even agriculture and retail trade are under government direction and control. In Burma, all public utilities are owned and operated by the State. Land and forests are nationalized. The petroleum and mining industries are operated as joint ventures between government and existing foreign firms. The initiative in industrial development has been taken by the State although most industries are open to private capital either singly or in partnership with the government. In India, even though the objective of policy is the establishment of a socialistic welfare state, only communications, railways and air transport, as well as defence industries and a few "key" industries (*e.g.* fertilizers) are at present government monopolies.[1] Government, however, has the power to control and to regulate the operation of industries in the national interest and would undertake necessary industrial investments where the private sector would not normally do so. Furthermore, the plan and the government policy announcements in India have laid down clearly marked fields for development by private enterprise (in certain cases, by small-scale and cottage industries only, within the private sector), and one of the avowed objectives proposed for the second five-year plan is to expand the

1. Though shipbuilding has been assigned to the public sector, the enterprise is a joint venture; on the other hand, government has a large share of coal mining as well as electric power generation but does not have a monopoly.

public sector. On the other hand, in Japan almost all economic activities are carried on by private enterprise, the exceptions being such public utilities as communications and most railways and a very few selected industries, such as the cigarette industry. In the early Meiji Period, most of the industries were started by the state, but were later handed over to private hands.

In most ECAFE countries, there are certain fields, *e.g.* the development of basic facilities like communications, transport, and power, where government investment can help raise the productivity of private investment without competing with the latter; owing to the heavy investment involved, as well as the risks of non-profitable operation for an initial period, private capital is shy to enter into such fields. In addition, to ensure adequate investment in other basic fields (and sometimes also to avoid a concentration of private economic power) it may be necessary for a government to take on the role of investor in other directions; in India, for instance, new undertakings in the steel industry are to be in the public sector. Wherever the line of demarcation between the two spheres of investment may fall, it is well to have it clearly defined and, once defined, adhered to without frequent changes, in order to instil confidence in the private sector regarding its role in the economy. There may well be, however, certain fields of activity open to both public and private capital, and this in fact is the case in many countries. Here it is desirable that there should be no fiscal or other discrimination in favour of public investment.

An argument sometimes advanced in favour of having the public sector enter into fields usually occupied by the private sector is that public enterprise may take the lead in improving the quality of the product, reducing the cost, or improving the production process. This is usually done by means of model farms or similar undertakings. These should, however, be limited to giving a real demonstration and should not, as long as the field is supposed to be in the private sector, undersell the private enterprises because of special facilities received from the government.

The relative size of the public and private sectors depends only partly on lines of demarcation. The pattern of investment, *i.e.* its distribution between the various sectors and industries, is the other determinant.

Once the specific fields of development by public and private investment are decided, it is necessary to estimate as realistically as possible the plans of private investors and the behaviour of individuals in response to such changes as larger incomes, provisions of public services, or increased taxation. The Economic Commission for Latin America has in the last few years studied methods of projection of various aggregates. Many of the techniques may be applied to countries of the ECAFE region either directly or with certain modifications.[1] But any technique of projection based on constants established from the past will be subject to a large margin of error when applied to an era of more rapid development in the future. In many countries, no reliable projection may be possible because the magnitude and nature of the public investment programme may never have been experienced before. The error of projection also increases with the inadequacy of data, and statistics in most countries of the region are very deficient.

Co-ordination of public and private investment is facilitated if the private sector is associated with the process of planning from the very beginning. Thus, in China: Taiwan, the private sector targets are transmitted through the manufacturers' associations. This does not mean that private sector targets can be as strictly established as public sector targets.[2] But efforts should be made to have the private sector targets as realistic as possible.

Finally, this leads to the question of adopting the correct policies for the realization of private sector targets. On the resources side, in an integrated development programme, the financing of public sector targets should not be regarded as more than part of the picture; a tax or other means to finance public investment will not be very helpful for the implementation of the development programme as a whole if it drains the resources needed for private investment. Where the fulfilment of private sector targets is impeded by lack of skill, lack of confidence in the future (including the fear of nationalization), trade and exchange controls, etc., it is possible to remove at least some of the factors impeding private investment. Lack of capital can, to some extent, be removed by improvement of the capital market and under certain conditions by public credit extension. Capital may sometimes also be attracted into certain fields by government guarantee. One practice adopted by the government in some countries, *e.g.* Ceylon, India, and the Philippines, is to start certain industries requiring large capital or new techniques, or involving unusual initial risks, and to transfer them to the private sector at a later stage when they can be operated profitably. In Pakistan, the Industrial Develop-

1. *Introduction to the Technique of Programming*, UN Publication, E/CN.12/363.

2. See *supra*, p. 35, concerning the difference between private sector targets and public sector targets.

ment Corporation, charged with the provision of equity finance, has functioned successfully for some time and has developed a number of industries either directly or in association with private firms. The intention is to hand over the new enterprises to joint stock companies after the industries in question are well-established. In India, the recently instituted Industrial Development Corporation is intended to operate similarly. Joint ventures, with both public and private capital, seem to be increasing in popularity in many of the countries in the region.

The means of realizing private sector targets through appropriate government policies are varied, ranging from inducements such as subsidies and liberal depreciation allowances; provision of scarce resources including credit, foreign exchange, and certain strategic materials; provision of services, such as power, transport facilities, and housing for workers; protection from foreign competition, guarantee against early nationalization, and guarantee of fair competition in the event of government entry into the industry to regulatory measures like taxation, control, or direct limitation or prohibition of investment in non-essential fields. However, to enable a more realistic estimate to be made of how high the private sector targets can be set, the employment of these various instruments of policy should preferably be decided upon and made known in advance, before private sector targets are established, a practice which very few countries have followed in the past. The absence of any clear policy towards the private sector, whether of encouragement or of control or a mixture of the two, is unlikely to lead to a properly integrated development programme in which the resources of the two sectors are harmoniously developed.

Planning machinery

Administration in a modern state requires as much co-ordination and "planning" as economic development. Hence, when a government functions efficiently and processes of co-ordination are natural to it, little that is new in administrative or implementing machinery will perhaps have to be added for the planning and execution of departmental programmes of development. In particular, the prior development of inter-departmental co-ordination by the committee system will prove of great value for this purpose.

However, there are aspects of development programming—as will have been evident from the preceding parts of this paper—which result in new functions that cannot be discharged effectively either by the departments directly or by inter-departmental co-ordinating committees. Such functions include the estimation of total available resources, the determination of the rate of capital formation, the establishment of consistent sectoral targets, the examination of departmental or sectoral programmes for mutual consistency, and the anticipation of the impact of the development programme as a whole. These functions have to be performed in a separate unit, even though such a unit may, for administrative reasons, be located in one of the departments. This unit then becomes the planning agency.

It should be made clear that although there can be only one national planning unit, and hence any such agency must be a "central planning agency", this does not mean that the resulting development programme should be centrally evolved from above rather than below and even less that it should be centrally executed.

While the actual functional relationship of the planning unit with other organs of government is obviously more important in the proper discharge of the planning work than its formal place in the governmental structure, the latter is of some importance also, if only because it may have a considerable effect on the functional relationship. Since in the actual location of the planning unit a great variety of arrangements exists among the ECAFE countries, there should be scope for a useful exchange of experience.

Relationship with policy authority

There are obvious advantages in having the planning unit in direct and continuous administrative contact with the decision-making authority. In order to formulate a realistic programme the planning units must get clear directives from the policy authority concerning objectives, acceptable and non-acceptable instrument of policy, assumptions concerning availability of foreign exchange resources, allocation of resources to purposes other than development, etc. For instance, there would be no point in formulating a programme which depends, say, on heavy taxation of farm incomes if such a procedure were politically unacceptable. In view of the shortage of skilled staff, it is particularly important to avoid unnecessary planning which will turn out to be abortive because of rejection by the policy authority.

In addition to having a reasonable notion of what is likely to be acceptable, the planning staff should also know precisely what is required of them, that is, in what form the alternatives of development policy have to be presented. Thus, for instance, the planning staff could prepare a single complete development programme, resting on a single series of assumptions—this

has been done in most ECAFE countries—or a number of alternative programmes by varying the assumptions and indicating the alternative policy implications of each of the programme.

It has been suggested, in view of the uncertainty of external resource availabilities, that more than one development programme be prepared, not only with reference to different levels of total resources required but perhaps with varying distributions of development expenditure, since external resources may influence the determination of investment priorities. The same principle could perhaps be extended, and the planning staff could prepare alternative programmes of development on different hypotheses and indicate the precise implications of different types of policy. But, in order to make the best use of the limited number of trained persons available in ECAFE countries for the purpose of planning, it is desirable that the formulation of alternative programmes be limited to what is really necessary and be strictly within the range of practical possibility. A compromise is to make the development programme flexible and capable of expansion, contraction, or alteration without seriously destroying the inter-industry co-ordination.[1] The need for close ties between the planning staff and the policy authority, so that new problems arising from time to time may be taken into account within the development programme, is seen especially when there is need for revision of a development programme owing to changes in circumstances.

Experience in the ECAFE region in regard to the position of the planning unit in relation to policy-making units of government has been varied. In Burma, the Ministry of National Planning is responsible for initiating and co-ordinating the development plans of various departments and for preparing the over-all national plan, which is then reviewed and approved by a high-level policy body of the Cabinet, called the Economic and Social Board, presided over by the Prime Minister. In addition to the formulation of broad economic policy, the Board has instituted a system of progress reporting to enable it to discharge its supervisory functions. In mainland China, the State Planning Commission was in 1954 transferred from the Central Peoples' Government to the State Council. The planning unit in Taiwan is the Economic Stabilization Board which is placed under the Executive Yuan. In India, the Planning Commission is responsible to the National Development Council, which consists of the Central Cabinet and the Chief Ministers of the constituent States. The Prime Minister himself is the Chairman of both these bodies, and two of the members of the Planning Commission are also members of the Central Cabinet. The Planning Commission is serviced by its own secretariat, and the Commission determines the over-all size of the development programme and co-ordinates the expenditure programmes, for development, of the Central and state governments. Thus, co-ordination and implementation of the plan are facilitated not only for the Centre, but also for States. In Ceylon, the Planning Secretariat reports directly to the Cabinet; the task of the planning authority is essentially to initiate and to co-ordinate the development programmes of various government departments and ministries. In Pakistan, the Development Planning Board is similarly charged with the job of co-ordinating the expenditure programmes (for development) of all departments and ministries. The Board, however, reports to the Minister of Finance, and the task of the Planning Board has, so far, mainly been to assist in determining the allocation of the limited funds available for implementing various departmental programmes. In Indonesia, the Planning Bureau co-ordinates the plans and expenditure programmes of all ministries and reports directly to the Planning Board of the Cabinet, which is the ultimate policy-making body. The effectiveness of the Planning Bureau is sought to be achieved by making the Director-General of the Bureau also the permanent secretary of the Planning Board, as well as chairman of the inter-ministerial "Co-ordinating Committees", of the "Iron and Steel Committee", and of the "Industrial Development Committee", which is concerned with the planning and execution of major industrial projects. In the Philippines, the National Economic Council, which is responsible for the preparation of the development plan, reports directly to the President, and close liaison is also established with the legislative authority, namely Congress, through the National Economic Council in which four out of eleven members are from Congress. The National Economic Council obtains data and proposals for development from various national developmental corporations and formulates a co-ordinated development programme; it is expected also to provide advisory service to the President and to elaborate, on behalf of the President, the national economic policy. In Afghanistan, the planning machinery consists of a Supreme Council (composed of cabinet members), the Central Planning Unit, and the specialized commissions. The latter prepare sectoral plans for each ministry, and the Central Unit is charged with the analysis of, and assignment of priority to, the projects submitted by the specialized commissions. In Japan, there was, until lately, no central planning agency; although, in the context of the rehabilitation programme, each agency of the government had a planning unit responsible for the

1. See *supra*, p. 39.

initiation and implementation of the agency's projects, the co-ordination of these departmental plans was only achieved through Cabinet allocation of financial resources. Recently, however, the Economic Counsel Board was reconstituted as the Economic Planning Board and is now responsible for over-all planning.

Relations with government departments: The second requirement of efficient planning pertains to the relationship of the planning body to other government departments. The implementation of a development programme rests ultimately upon the administrative machinery, and obviously there is no merit in drawing up a programme which cannot be implemented. A programme clearly beyond the capacity of the administrative machinery would lead to bottlenecks in actual implementation and to a misdirection of resources. In the first five-year plan in India, one reason why plan expenditures fell short of the target was the inadequacy of the existing administrative machinery to take charge of the vastly increased programme under the plan.

The most important functional relation in the planning complex is perhaps the tie-in between the planning and the budgetary functions. Apart from providing the necessary funds for implementing specific plans and projects, the budget must be in accord with the broad fiscal policies called for by the over-all development programme. In India, the problem was tackled by the representation of the Finance Minister on the Planning Commission and by the introduction of close collaboration between the Planning Commission and the Ministry of Finance in the preparation of the Capital Budget. In Burma, working accord was secured for a time by having the same official hold the permanent secretaryships of the ministries of Finance and National Planning and is now secured by the establishment of a Budget Committee which includes representatives of the Planning, Finance, Industries, and Trade Development ministries and which reports to the Economic and Social Board presided over by the Prime Minister and composed of the ministers of Planning, Finance, Industries, Mines, and the Chairman of the Central Bank. In the Philippines, the National Economic Council formulates economic policies, prepares social and economic development programmes, reviews periodically the implementation of the approved programmes for each fiscal year, and makes recommendations on the annual budget estimates. One of the ways in which the respective functions of the planners and the treasury have been co-ordinated in many countries is through the separation of the capital budget from the administrative or revenue budget, entrusting the formulation of the former largely to the planning unit.

However well a plan may have been formulated, it needs constant revision or modification in the light of changing circumstances. This calls for constant co-operation between the planning staff and the controllers of the national purse. The most scientific way of arriving at a financial budget would be through the formulation of a nation's economic budget against the background of an annual economic survey of the country. In parliamentary governments, for instance, like that of Burma, the planning and financial authorities ministries of National Planning and Finance) co-operate in the formulation of economic and financial budgets of the nation, the differences between them being reconciled on a higher level, namely, by the Economic and Social Board of the Cabinet. In the Philippines, the budget-making process is somewhat facilitated by the fact that both the planning body and the Budget Commission report directly to the President.

In addition to the government's financial budget, other governmental instruments in the economic field such as monetary and credit policies, pricing policy, wage policy, etc. should also be geared to the development plan. Provision for the representation of persons responsible for the formulation of such policies on the planning body is one way of securing such co-ordination. The head of the central bank is sometimes included in the highest planning organ. In Afghanistan and the Philippines, the planning staff have been taken from various government departments—in the former case generally on a temporary basis.

The planning machinery in India provides an example of the balancing of departmental or administrative and economic and technical experience in the formulation of a development programme. The staff of the Indian Planning Commission consists of both administrators, drawn from regular government departments, and professional men (mainly economists, statisticians, and engineers), recruited either from government departments or from universities and other institutions. To lay a basis for the second five-year plan, a draft plan frame was drawn up by the Statistical Adviser to the Cabinet, in consultation with the planning staff and his own team of statistical experts, and a tentative framework was formulated by the planning staff in consultation with various government departments and departmental experts and technicians, in line with the draft plan frame. On the basis of the draft plan frame, and in the light of priorities indicated therein, the various departments of the Central government, and the state governments have drawn up their tentative programmes of development, the state plans, in their turn, being based on programmes prepared at the district

level. These Central and State plans are to be reviewed and revised by the Planning Commission before the final five-year plan is drawn. The co-operation in mainland China between the State Planning Commission and the various ministries in commodity budgeting has been discussed in a previous section.[1]

Relations with the public

In an "integrated" development programme, the response of the private sector to any programme of government expenditures—including not only the response of private business but also that of consumers —will have an important bearing on the development programme's success. The planning body should, therefore, be able to make a reasonably good assessment of what type of programme would be supported by the people, and, for this, the planning body should have a good understanding of the motivation of the different groups of producers and consumers in the economy. Thus, the planning body must not only have data relating to the broad trends in the economy, it should also have a flow of current data relating to events and opinions in different segments of the economy and thus be able to judge the responses of farmers, businessmen, workers, and other groups to different policy measures.

Consultation with business and trade union interests for the successful implementation of the government's development programme are in a few countries provided for in the planning organization in the form of non-official advisory councils. India, in the formulation of the second five-year plan, has sought to maintain contact with the public not only through the "panel of economists" drawn both from government departments and from universities and other institutions, which advises the planning staff on the various policy issues, but also through wide publicity given to the draft plan frame and through the drawing in of chambers of commerce, individual businessmen, professional men (such as engineers, etc.), and social and political workers, as well as individual citizens, thus encouraging and enabling them to make their contribution, either through technical suggestions or through more general reaction to the implications of the plan. In most other countries consultative facilities even when provided do not appear to have been utilized extensively.

Qualifications of planning staff

The above requirements of a good planning machinery serve to indicate also the type of staff needed for efficient planning. Thus, the planning staff must be able to form consistent targets and programmes; they must have an understanding of the responses of private business and persons and of the economic as well as technological problems of development; they must be able—especially in view of the existing state of statistics in the ECAFE region—to derive meaning from the scanty available data (without reading too much into unreliable or scattered figures); they should, therefore, have knowledge of local conditions combined with good economic judgement; and, finally, they must be in close touch not only with the political authority but also with government departments and know what is administratively feasible. The task of planning requires, in short, not only economists and statisticians but also engineers and scientists, as well as administrators drawn from different government departments and technicians drawn from private business, with practical experience of the actual working of projects.

One approach to the problem of increasing the supply of good planning staff has been an attempt, under United Nations auspices, to provide specialized training for this purpose to higher ranking officials from the Latin American region:[2] of the International Bank has also set up a development planning institute to provide such training to selected officials from all over the world, beginning in January 1956. Other possible approaches obviously include acquisition of on-the-job experience and training and the provision, through technical assistance programmes, of foreign experts or of facilities for study of planning procedures abroad.

Relation of planning to implementation

Whether the planning body should also supervise or at least expedite the development programmes has been the subject of some controversy in the past. On the one hand, it is argued that the supervisory body which is responsible for progress reporting and evaluation of the progress of the plan should obviously, to ensure objectivity, be separate from the planning group. This principle is followed in the case of Burma, where a separate body, the Economic and Social Board, is entrusted with expediting and supervisory functions. On the other hand, it is also argued that, in order to induce the planners to produce more realistic and practical plans, the planning agency should also be charged with expediting and supervisory functions. It has been pointed out in public discussions that shortcomings in the implementation of India's first five-year plan were due to the lack of an effective central machinery to speed up the execution of the plan, the central government being left

1. See *supra*, p. 48.

2. See *Report on the ECLA/TAA Economic Development Training Programme* (E/CN.12/376).

dependent on state governments for programming and operations. In the Philippines, it has been argued that the present National Economic Council, which has only advisory functions, is ineffective, and that a really functional body should undertake planning, programming, and follow-up activities, with full power to correct faulty or misguided execution of approved projects as well as to recommend to the President necessary changes and new policies for adoption by the government. In mainland China, the State Planning Commission is given the function of supervising the execution of the plan.

Research and collection of statistics

The problem of essential statistics is discussed in a separate paper.[1] The question of whether the collection of statistics and also economic research should be functions of the planning machinery is important. In some countries, the collection of statistics is basically a by-product of administrative requirements. A new start has been made in a few countries, however. In Burma, the recently instituted Central Statistical and Economic Department has been made a part of the Ministry of National Planning, so that the flow of data and its analysis can be closely co-ordinated with the requirements of planning. In India, the Central Statistical Organization, the co-ordinating authority for statistics, is under the Cabinet Secretariat; for the purpose of collecting data required for planning, a multi-purpose national sample survey has been initiated and, although not located within the planning commission, it has strong links with the planning machinery. The planning commission in India has also its team of research workers, although the task of research for planning is considerably diffused, being done by a large number of institutions both within and outside the government under the general direction of the "panel of economists" and of the Statistical Adviser. In Ceylon, the Department of Census and Statistics is under the Ministry of Finance; under a reorganization scheme that is now proposed, there would be a statistics section attached to the Planning Secretariat. In Indonesia, the Central Bureau of Statistics is a part of the Ministry of Economic Affairs; the tie-in between statistics and planning is still in the process of evolution, and collection of data is still mainly for the administrative requirements of different government departments. In Pakistan also, the newly constituted Central Statistical Office is in the Ministry of Economic Affairs, and the Development Planning Board has to rely on data collected by other government departments as co-ordinated by the Central Statistical Office. In the Philippines, the Bureau of the Census and Statistics is under the Department of Commerce, and the National Economic Council, the planning body, is charged with statistical co-ordination and the maintenance of statistical standards. In Japan, the Statistical Standards Division, responsible for co-ordination, is attached to the Administrative Management Agency of the Prime Minister's office. Apart from data collected by different ministries, the Statistics Section of the Economic Planning Board also collects primary data and undertakes analysis of available data for its own purposes. In mainland China, the State Statistical Bureau under the State Council and, in Taiwan, the Directorate of Budget, Accounts, and Statistics under the Executive Yuan are in charge of statistical co-ordination. In Afghanistan, data collection is almost entirely a departmental affair; in connexion with planning, the specialized commissions preparing various developmental projects collect their own data and the Central Unit, responsible for the job of co-ordination, has little access to further data.

In discussing the organization of statistical intelligence, countries could perhaps fruitfully examine the eight criteria proposed by two British economic statisticians.[2] Against the background of scanty available data and the need for forging ahead with development planning in the immediate future, these criteria suggest that the tasks of economic research and of statistical co-ordination should be linked intimately to the planning machinery, so that planning could proceed from a surer base and the collection and analysis of data could be given purposeful direction.

1. See *infra*, "Statistics required for planning in the ECAFE countries".

2. C.F. Carter and A.D. Roy, *British Economic Statistics* (Cambridge University Press, 1954), p. 152. The criteria are: Does the statistical system make a satisfactory impact on *policy*? Is the system *comprehensive*? Is it *flexible*? Is it *well integrated*? Does it make a satisfactory *impact on the public*? Does it give uniform and high *standards of statistical technique*? Is it efficient in its use of statistical *manpower*? And finally, is it efficient *in money cost*?

STATISTICS REQUIRED FOR PLANNING IN THE ECAFE REGION[1]

An ambitious development programme without sufficient data may lead to bottlenecks preventing completion of the programme, shortage of consumer goods in relation to the increased effective demand and consequent inflation, balance-of-payments difficulties, and social unrest. When control measures are absent or inadequate, all these difficulties may be intensified. On the other hand, if the programme is kept deliberately moderate, owing to lack of data, this may lead to underutilization of available resources and defeat the very purpose of development planning to attain the maximum practicable rate of growth. Thus, planning calls for data relating to all aspects of the economy, and the data should be of high quality.

Obviously, development cannot await the building up of statistical information. The flow of statistics and their quality will improve as the economy develops. Where lack of data makes it necessary to begin with a few major projects with large "impact" effects, the study of the quantitative impacts of these projects may well lead to new data which can then serve in the next stage of programming and may gradually lead to an extension of the scope and an improvement in the quality of statistics as programming assumes a more general form. Meanwhile, practically all known social and economic statistics can be directly or indirectly useful for planning, provided they are available without too much delay. Any improvement in the availability and quality of statistics will help to improve the quality of a development programme.

The precise statistical series or data likely to be most useful or most essential will depend on a country's specific economic situation and the nature of its development programme. As emphasized in the paper on problems and techniques of planning,[2] no uniform planning procedure can be recommended for all countries; similarly, no uniform set of statistical series can be prescribed for all countries of the region. The problem of statistical requirements can be best examined with reference to each particular country and in the context of the existing data and the organization for their collection.[3]

It is not the purpose of this paper to outline all the types of statistics that may be of use for planning; nor can the problem be discussed here with reference to the special needs of any particular country. Rather, this paper will briefly consider the types of statistical data likely to be required in the formulation of a development programme, as outlined in the general paper on problems and techniques. In other words, this paper will discuss the data required and the data that could be improved for successful adoption of those techniques.

Two other points need to be stressed at the outset. In view of the generally limited financial resources available for planning and the scarcity of trained personnel, it would be wise to avoid devoting too many resources to the collection of new data as a preliminary to planning. Secondly, it is of the utmost importance, in developing a system of data for a country, to have a blueprint or picture of a fairly complete statistical system to be developed in the future. Such a blueprint should be drawn up in the light of the principal gaps in existing statistics and of the relative priorities of obtaining the various missing series, and it should include an appraisal of the accuracy and usefulness of the data already available, so as to avoid duplication, as well as to improve the quality, of existing data.

Statistics required for target setting

The first problem in development programming is to map out a "path" of development and to determine targets of income, consumption, investment, and employment. The most useful statistics in arriving at a consistent set of aggregative targets are those relating to national income accounts, demographic trends, and manpower disposition.

1. Revision of United Nations document ECAFE/DPWP.1/3, a working paper prepared for the Working Party on Economic Development and Planning.

2. "Problems and techniques of economic development planning and programming with special reference to ECAFE countries". *Supra*, p. 25.

3. A comprehensive classified index of statistical series regularly published in the ECAFE region is in course of compilation and is expected to be issued in 1956. Reports on changes in statistical organization and activities in ECAFE countries were issued in 1951 and 1953 (E/CN.11/322 and E/CN.11/371); the next report in this series is likewise expected to appear in 1956.

The rate of economic growth may be said to depend on the rate of capital formation and the complex of elements determining the capital/output ratio. A system of national accounts gives information on the former directly and, where data are available over a period, makes possible the estimation of the marginal capital/output ratio.

In most ECAFE countries, comprehensive national accounts must remain, for some time, a distant ideal.[1] Though information may be available on certain sectors, it may not always be possible to translate the available information into a complete system of national accounts.[2] The question arises here not only of the formal completeness of national accounts but also of their accuracy. There is also the danger relying too much on a set of national accounts, without sufficient reference to the basic economic realities behind the over-all aggregates.[3]

The fact that many ECAFE countries have limited their development programmes to isolated project planning rather than aiming at a well co-ordinated over-all plan may be partly attributed to lack of data. The requirements of data for the former approach are less rigorous inasmuch as partial data, or even rough-and-ready indicators, can be used with good effect, in the absence of more elaborate data.

In countries depending heavily on the export of a few primary products, the economic activity of the entire community may, to a large extent, depend on the income accruing from a small number of major exports. In such countries, the trend in export earnings can be used as an "indicator" of national income.[4] Statistics of external trade are, in general, available with a fair degree of accuracy in most countries, partly as a by-product of the collection of customs revenue and partly because such data are relatively easy to collect, involving only a few check-points through which trade has to pass.

Likewise, the derivation of capital formation can, in many countries, be attempted through import statistics. Aside from capital formation in the non-monetary sector, a large part of capital formation in under-developed economies is made up of imported goods, which thus provide a clue to the pattern of capital formation.[5] Where statistics of imports of capital goods are reasonably accurate, they may thus be made the basis[6]—together with indicators of building or construction activity[7]—of estimates of capital formation, or, at least, of its rate of change.

Where data on employment and on national income and related aggregates can be estimated, a consistent set of aggregative working targets can be formulated on the lines of national budgeting. National budgeting—and the adaptation of the government budget to the over-all national budget—has been adopted after the war in the Scandinavian countries and a few other European countries. In the United Kingdom the pattern of the annual *Economic Survey* has been to review the past year's developments and to forecast the principal economic variables for the coming year, on the basis of the policy measures proposed in the budget. National budgeting of the type adopted by Western European countries calls, however, for data which are not readily available in most ECAFE countries.[8]

1. See *Report of the Third Regional Conference of Statisticians* (E/CN.11/390). This conference, held in 1954, considered the problem of the improvement of national income statistics in the ECAFE region.

2. In the ECAFE region, a comprehensive system of national accounts is currently available only for Burma, Japan, and the Philippines, but the basic data used for estimation are not very reliable except in Japan. In China (Taiwan only) and Indonesia, national accounts are available only for the years 1951 and 1952. In India, published data leave unfilled some of the entries in the system of national accounts, but estimates of these magnitudes are now available, and a simplified scheme of accounts can be drawn up from available data. Estimates of total national income or gross national product or gross domestic product are available also for Ceylon, China (Taiwan only), Hong Kong, Korea, Malaya, Pakistan, and Thailand. Estimates of national expenditure including capital formation are available in six countries, namely, Burma, Ceylon, China (Taiwan only), Indonesia, Japan, and the Philippines, while separate statistics on capital formation are available for Hong Kong and India. Independent estimates of consumer expenditure—based on consumer surveys—are now available for India. National income by distributive shares and distribution by range of income are available only for Japan.

3. In Burma, national income estimates released about 1951 were extensively used for the formulation of the K.T.A. eight-year plan during 1952-53. With the sharp decline in exports of rice in 1954-55, the projections of Burma's income and of savings available for development—to the extent that they were based on anticipated export earning from rice—were not realized. This illustrates the danger of paying insufficient attention to the prime determinants of the national income—in this case, the preponderant dependence of the Burmese economy on the value of rice exports, while using the national income data of a country in the formulation of a development programme.

4. For an example of the way trade data have been used for deriving the trend in the income of Jamaica, see J.R. and U.K. Hicks, *Report on Finance and Taxation in Jamaica* (London, 1955) pp. 9-29. See also D. Seers, "The role of national income estimates in the statistical policy of an under-developed area", *The Review of Economic Studies*, vol. XX, 1952-53, p. 159, and the controversy which followed thereafter (*Ibid.*, vol. XXI, p. 223 and vol. XXII, p. 220).

5. The extent to which imports of capital goods can be segregated will depend on the classification scheme adopted for recording trade statistics. Where import data have not been recorded properly, statistics of exports of more advanced countries can, with certain adjustments, be used for delineating capital imports of under-developed countries. In such countries, improvement in trade statistics—a comparatively small project—can be very useful.

6. With mark-up to cover local costs.

7. Even a large part of construction can be estimated in many countries on a similar basis, either from data on imports of construction materials, or from similar partial data. The practice has been followed in Burma, Ceylon, and the Philippines. In India, construction has been estimated from the allocation of steel and cement costs to total costs of construction, the estimates thus derived being checked by the amount of coal moved by railways for brick-burning, and a ratio of brick costs to total costs of construction. Latterly, with gradual relaxation of controls, the steel cost estimates have been based on the production and import of specific types of steel used for construction.

8. Japan is an exception. Some effort to balance the economic and financial budgets of the nation is made in Burma, where the ministries of National Planning and Finance co-operate for this purpose. Pakistan publishes an economic survey at the time of the budget, but the data contained do not give an integrated account of the nation's receipts and expenditures. In India, some of the data corresponding to those in Pakistan's economic survey are given in the explanatory memorandum of the budget.

In many countries, where the broad magnitudes (like national income, saving, or capital formation) cannot be estimated with sufficient accuracy, it is possible for plans of development in certain fields to rest on the expected or estimated incremental or marginal values arising from a given development expenditure. More generally, where the magnitude of a certain segment is unknown, a convenient first approximation would be to assume that the magnitude would remain more or less invariant, so that the formulation of plans could well proceed on the basis of changes at the margin. In the formation of the first Indian five-year plan, while no accurate estimates of the over-all rate of saving were available, importance was attached to the measurement of the marginal rate of saving, which became an important target.

In areas of subsistence farming, however, estimation of marginal values may sometimes be difficult. Progressively wider statistical coverage and removal of underestimation over the years may raise the problem of deciding what part of the reported increase in output reflects the fruition of marginal efforts and what part is to be imputed to the factor of improvement in statistical coverage and accuracy. Besides, while data on *changes* can sometimes serve as indicators of the inter-relationship between different aggregates and may make it possible to evaluate the impact of a programme, a picture of the *total* resources and *total* output is still required for planning on an integrated basis. The collection and improvement of data on output should, therefore, be given high priority, including not only data on total output but also data on the disposition of output—more particularly, on the division between the marketed part of output and the part retained for producers' own consumption.

Apart from national income and related aggregates —or the best indicators thereof—demographic and manpower statistics are essential for setting aggregative targets. In fact, in many ECAFE countries, population censuses provide the basic data used for estimating national income, namely, data on gainful occupation[1] and the labour force, as indicated by data on age distribution, gives the employment potential. Population projection makes possible the estimation of future manpower and future consumption.

Population censuses alone may not, however, be adequate for the determination of, say, employment targets, and employment surveys may be necessary. In the ECAFE region, estimation of surplus manpower is especially difficult; surplus labour capacities may be seasonal, or surplus in the sense that withdrawal of workers from a given production process would not materially reduce national output. The concept and methods of measuring under-employment have been explored by the International Labour Office,[2] but no application of the methods prescribed by ILO has been made in the past. Special manpower surveys are, however, currently in progress in certain countries of the ECAFE region,[3] and the accumulated experience of these surveys will undoubtedly facilitate the planning of manpower surveys for other countries in the region.

Target setting entails the projection of the consumption of final goods and services. Two approaches are generally used: (*a*) from historical time series on goods available for consumption and (*b*) from a cross-section comparison of consumption patterns by income groups, based on family budgets. The former aggregates may be related to population and income, but the accuracy of the projection depends on the availability of such statistics over a sufficient length of time under normal conditions without frequent change of government policy as it relates to control over consumption. In most of the ECAFE countries such a condition has not been fulfilled in the short period since the war, and most of the statistics are either incomplete or not sufficiently reliable.

Statistics based on family expenditures are easier to obtain when the sampling method is applied.[4] When expenditure on different commodities, based on family surveys, is related to income, income-elasticity of demand may be estimated for different products, under certain simplified assumptions, showing the percentage increase of demand expected from a given increase in income.[5] But to make use of these data for planning, actual total

1. Population censuses are available in most countries of the region, although some of these censuses are not sufficiently accurate or detailed. Several countries have not had a census since the end of the second world war. Vital statistics of most countries are inadequate, or of incomplete coverage, so that annual estimates of mid-year population are not reliable. Accurate population projection requires sex and age distribution, fertility or reproduction rates of women by age groups, death rates by age groups, migration of population, etc. These statistics are not available in most ECAFE countries. Life tables are constructed only in Ceylon, China (Taiwan only), Japan, and Thailand.

2. See Chiang Hsieh, "Under-employment in Asia", *International Labour Review*, vol. LXV, June—July, 1952, ILO, Geneva. See also *Manpower Information*, DPWP.1/1, paper submitted by ILO to the Working Party on Economic Development and Planning.

3. Manpower and employment surveys for collecting information other than that obtainable from the population census are generally not available except in Japan. But a special manpower survey is being undertaken in Pakistan under the supervision of an ILO expert. In India a manpower survey schedule is reported to have been included on a pilot basis in some of the recent rounds of the National Sample Survey.

4. In India, such statistics are gathered periodically in the National Sample Survey covering all classes of people. A survey was also conducted recently in Ceylon. In Japan regular surveys have been conducted for urban workers. Surveys for agricultural families in Japan are not presented by income groups but by size of land holdings. For other countries, similar statistics relate to particular classes of people in certain large cities only.

5. Such elasticities have been calculated in India and Japan.

consumption is still required. When the first approach (use of historical time series) is attempted and when total consumption in different years is not available, certain indexes or indicators may be compiled to show the annual rate of change of consumption of each product in relation to population and income. These, too, have to be used together with the total output or consumption to derive the desired change in absolute amount. Indicators of output may include production indexes, volume of traffic, trade, etc.

The setting of targets leads naturally to a study of the resources available in the economy. Data are, therefore, required on the geological and other untapped resources, *e.g.* potential water-power, which set limits to the possibility of development.[1]

Statistics required for the determination of development priorities

The criterion of social marginal productivity is applicable both to the determination of development priorities among various fields of development and to the choice of projects within a field. In many cases, the broad priorities for development may be determined by specific "bottlenecks" in the economy. The identification of these bottlenecks is relatively easy and does not require any special statistics. But given the broad priorities or directions of investment, the selection of specific investment projects, their size, or "scale of operation", and their location still have to be decided upon. It is in this context that the criterion of social marginal productivity is perhaps most frequently applied. The measurement of social marginal productivity[2] may involve taking into consideration possible effects of an investment in several directions, including its effect on national income, its net effect on the balance of payments,[3] and its effect on employment. The application of these criteria involves considerable value judgement, but a "ranking" of projects or investments by their approximate social productivity may be possible even without elaborate statistical information. The effect of an investment on national income can be roughly approximated by applying to direct value added a set of corrections for tariffs, taxes and subsidies, external economies, selling of products or services below cost as a government policy, etc.

As it is difficult to measure the indirect effects (on national income) of any investment, it may be useful, as a first approximation, to compare (*a*) the capital/output ratios that may be obtained from different patterns of investment, using data on the increments of output that may be obtained from units of investment in different directions,[4] as well as (*b*) the capital/labour ratios, and (*c*) the employment/output ratios, so as to facilitate choice between different types of investment for achieving a given output or a given target of employment. Attempts have sometimes been made to generalize from the experience of a sample of new projects, or new industrial units, with a view to assessing the probable costs of attaining a given output.[5]

Where a completely new industrial process is introduced from abroad, the ratios obtaining in other countries may be taken over initially, with suitable adjustments for differences in labour skill, supply and cost of materials, power, transport, etc.

Priorities for different investments should also take account of information on the employment effect of different types of investment. For large industrial undertakings this is fairly simple, but the calculation of indirect employment, *e.g.* of multiple-purpose river-valley schemes, calls for special studies of projects already in operation. Here also, planning could, with suitable modifications, make use of the experience of other countries.[6]

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1. Where no information on geological resources is available, this obviously lends priority to the work of geological survey. (See *Development of Mineral Resources in Asia and the Far East*, Report and documents of the ECAFE Regional Conference on Mineral Resources Development, 1953 (UN publication, Sales No. 1953.II. F.5.). For instance, the discovery of natural (Sui) gas in West Pakistan recently has had far-reaching effects on the development programme of that country, in that the picture of available resources has completely changed.

   Similarly, in the field of assessment of water-power resources, recent development in India—where engineers are now making use of a contour-map study of the South Indian peninsula for assessing the distance between the "catchment area" of rainfall and the sea, together with the total drop which can possibly be secured for water stored in the catchment area with the aid of dams and taken to the site of the drop by means of tunnels bored through hills—give an entirely new aspect to the problem of collection of data on (potential) resources for economic development.

2. See "Problems and techniques etc.", *supra*, p. 41. See also H.B. Chenery, "The application of investment criteria", *Quarterly Journal of Economics*, vol. LXVII, 1953, p. 80.

3. See *infra*, latter part of next section.

4. Of course, to the extent the economy is integrated in such a way that all the sectors are interrelated, investment in any particular sector or project will materialize itself in final output to which all the sectors contribute. This limitation has to be remembered when working out sectoral or project capital/output ratios.

5. Calculations on these lines have been made recently in Pakistan, for assessing the net gain derived from investment in agriculture. In India, data have been collected in respect of most of the new industrial undertakings, as well as the replacement cost of some established industries, with a view to assessing the likely costs of a given output in different directions; these data—now being augmented and improved—are being used for the formulation of the second five-year plan. Use has been made of an estimated over-all capital/output ratio in Afghanistan, Burma, Ceylon, India, Pakistan, and the Philippines, for purposes of projecting the likely increase in national income over a period of years, in connexion with the determination of primary working targets, but the estimates have not been more than conjectural.

6. Even if the TVA (Tennessee Valley Authority) experiment in the United States be deemed to be unsuitable for drawing conclusions for the ECAFE region, countries in this region could perhaps make use of the experience of India, where data are being compiled on the direct and indirect employment effects of such projects as the DVC (Damodar Valley Corporation), the Bhakra-Mangal project, etc.

So far as the capital/output and capital/labour ratios are concerned, incremental ratios may be considered as more relevant to economic development planning than average ratios, and sample investigations may usefully be carried out into the operation of new investments or investments recently matured. For instance, data on present low yields in agriculture in India and Pakistan compared with other countries and the possibility of raising yields substantially through irrigation, use of fertilizers, and better techniques (as indicated by yields on experimental farms) have led to large developmental outlay on projects of this type (*i.e.* irrigation, production of fertilizers, etc.) in these two countries. In other words, once a set of targets is established, the alternative paths leading to these targets, and the investment requirements for these various paths, may to some extent be determined on the basis of estimates of the related changes of investment, employment and output in different directions. Basic data to facilitate such estimates have, therefore, to be collected wherever possible as an aid to the determination of investment priorities.

In the determination of such priorities, the supplementary effects of investment are an important criterion. One way of approaching this problem is to look for existing bottlenecks in (or causes of inelasticity of) supply. As stated above, this does not call for any special statistics *per se;* rather a general enquiry is necessary into the factors impeding expansion of output in different fields of production and the possibilities of removing them.

Statistics required for inter-industry co-ordination

Inter-industry co-ordination calls for data on the requirements and supply of intermediate goods for the production plans envisaged, including materials, power, and transport facilities. For securing inter-industry co-ordination, the construction of national input-output tables is a technique adopted in some advanced countries. The data required for the construction of such a table are the inter-industry transactions in the economy—or in other words, the break-downs of input requirements and output utilizations of all industries, or sectors, in the economy. Such a table could be elaborated further into inputs for current use and for capital formation, necessitating a break-down of the purchase or utilization of every industry, or sector, between current production and asset formation.

In the absence of detailed data necessary for the construction of a national input-output table, one way of securing co-ordination between sectoral investment plans is through "commodity budgeting", or the determination of the requirements of materials, and the utilization of the products of important or strategic industries likely to be in short supply. For instance, a "steel budget" may be drawn up by estimating the demand for steel from the various sectors of the economy to be compared with the projected output and net import of steel. The data required for commodity budgeting may not be difficult to secure, at least for the more strategic commodities, especially since the new demand for the output of any industry would be—at any rate in part—embodied in the development plans of other industries or sectors.

When data on the material requirements, *e.g.* for a new process of production, are not available, engineering data on material coefficients in other countries may be used with certain adjustments.[1] The use of technological ratios permits generalizations on the basis of partial data; the task of data collection is also facilitated since current data can be used, and the picture is not distorted by errors in data relating to the past.

In some under-developed countries, analysis of external trade data on the one hand and data relating to the limited number of industrial units on the other may make it possible to draw up a rough picture of inter-industry transactions within some sectors of the economy. This would be especially true of economies where most of the industrial production and trade is concentrated in the hands of a few companies.[2]

Finally, for drawing up foreign-exchange budgets, one requires data not only on past trends of exports and imports, prices of major export commodities, and terms of trade,[3] but also on the inflow and outflow of capital over the past and the reasons therefor.[4]

1. Technological relationships can be taken over from other countries with greater assurance than data on capital/output ratios, or similar relationships. Even here, however, the use of technological ratios from other countries may be misleading because technology is not everywhere the same, and differences in labour efficiency, in the quality of the material, etc. can make for differences in inputs per unit of output.
2. Even in a large and partially-industrialized country like India, it has been found that analysis of about 2,000 company accounts will provide data relating to more than 75 per cent of the corporate sector. For industrial countries, a sample of about 500-1,000 financial statements covers most of the larger companies; and if a well-planned random sample survey is conducted, a fair idea of input-output relations, material requirements, etc. can perhaps be derived for the organized industrial sector.
3. For export-orientated economies, terms of trade are extremely important in their effect on the possibility of securing resources for development; the calculation of the terms of trade can be made with existing data on unit value or prices of export and import commodities. See "Gains from trade in ECAFE countries, July 1950 to June 1953", *Economic Bulletin for Asia and the Far East*, vol. V, no. 1, May 1954.
4. Data on capital transactions are, in general, unsatisfactory, and there is room for considerable improvement along the lines suggested by the IMF. (See International Monetary Fund, *Balance of Payments Manual*, 1950.)

In estimating import requirements, a mere projection of past experience cannot be of much use. What is required is the estimation of the direct as well as the indirect requirements or imports arising out of, and stimulated by, the development programme. Certain data for this purpose may emerge from the process of project-making.[1]

It may be noted that the setting of private sector targets calls for data relating to the response of the private sector, both as producers and as consumers, to given policy measures adopted by the government, *e.g.* the effect on consumer behaviour of taxation, etc. Estimation of such parameters calls for historical data on income and consumption, taxation, investment, output, etc., and, except for Japan, reliable historical series relating to most of these magnitudes are not available. In general, analyses such as these can follow only after development has proceeded some distance and data on different aspects of the economy have become widely available. Correlations based on partial data—and conclusions derived therefrom—may be deceptive.

Statistics required for continuing programme evaluation and revision of targets

Once a development programme has been formulated, and is under way, two types of data are necessary for a continuing evaluation of the programme and for revision of targets.[2] In the first place general indicators of the state of the economy are needed; these will indicate the over-all adequacy or inadequacy of the programme in relation to the targets set for achievement and in relation to the maintenance of internal and external stability which are necessary conditions for the success of any development programme. Secondly, data are required on the actual working of the various projects in the development programme; these will make possible a continual improvement of the content and quality of the programme and a revision of it whenever circumstances so require and permit.

In the first category, again, there is need for data on national accounts, and, especially where these are not available, data on price movements and the cost of living, employment and unemployment, and the balance of external payments, together with indicators of unused capacity or slack in the economy. It is particularly important to keep close watch on the most sensitive indicators of inflation. A problem is presented by the difficulty of isolating "functional" price increase from incipient inflation, which may manifest itself only after it has already gone some distance. However, a safe way out is to try to keep track of excess liquidity in the system, which is generally the precursor of an inflationary price rise.[3] It is necessary also to analyse the impact on the economy of the development expenditures in the public sector. This calls for an analysis of government budgets on an economic basis.[4]

In the evaluation of the impact of a development programme, data on price changes serve numerous purposes. In the absence of such aggregative data as would permit the preparation of national budgets, price indexes are the most effective indicators of the over-all adequacy or inadequacy of a development programme,[5] and a careful watch on price changes can help in the revision of over-all targets of expenditure. Relative price changes can also be useful in indicating sectoral bottlenecks; in the absence of other data, specific shortages resulting from faulty planning can be deduced from price movements.

While downward price movements can indicate the existence of slack in the economy, and therefore the possibility of, and need for, expansion of the development programme, attention should also be paid to other indicators of unused capacity in the economy. Evidence of excess capacity in factory industry is relatively easy to derive from data on installed capacity and output, but unused economic capacity in general, in the form of wholly or partly unemployed labour and other resources, is harder to specify. Here, data on land utilization and on employment and the employable labour force can be useful.

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1. For instance, in India, a special survey has been initiated by the Reserve Bank of India for the estimation of the foreign-exchange component of plan expenditures during the first five-year plan. Collection of these data would make possible the evaluation of different projects according to their balance-of-payments effect—in the first instance, the direct requirements of foreign exchange—and thus help in the determination of priorities between different projects.

2. Continuing evaluation and revision are necessary because available data in the region are generally inadequate, and any programme that may have been formulated on the basis of available rough-and-ready data needs to be continually revised as new facts emerge either as a result of the working of the development programme or otherwise.

3. For this, it is necessary to have data on the factors affecting the money supply and its velocity. Some of these factors are: international reserves of gold and foreign exchange, bank loans to governmental and semi-governmental organizations, bank loans to the private sector, cash balances of the government, savings and time deposits of the banking system, and velocity of bank credit. See "Report of the Working Party on financial aspects of economic development programmes in Asia and the Far East (second meeting), 1954" (E/CN.11/I&T/106). See also "Economic indicators of inflation in ECAFE countries", *Economic Bulletin for Asia and the Far East*, vol. VI, no. 1, May 1955, p. 13.

4. For details of the manner of such classification of government budgets, see "Report of the workshop on problems of budget reclassification in the ECAFE region" (ECAFE/L.95). See also *A Manual for the Classification of Government Accounts*, a document prepared by the Fiscal and Financial Branch, Bureau of Economic and Social Affairs of the United Nations, for consideration at the above workshop.

5. For instance, the relatively modest nature of India's first five-year plan is brought out clearly by the more or less steady downward trend in prices in that country since the middle of 1954; in spite of enlarged development outlays incurred in the recent past, prices today are some 10-15 per cent lower than before the Korean war.

Data on employment or unemployment trends are not generally available in the ECAFE region on a current basis. In view of the importance of achieving larger employment—in several countries a major target—there is need for such data. So far, only Japan has adequate statistics on the subject, although a foundation has been laid in India with the multi-purpose National Sample Survey for collecting data on unemployment at frequent intervals. Again, if complete data are not available and cannot easily be collected, reliance may be placed on indicators and on indirect evidence. Thus, population and vital statistics, giving estimates of the number of new entrants into the working force every year, are useful in showing the magnitude of the problem of employment, and indicators of new employment may be used in conjunction with the above for determining the degree of success of the development programme in providing adequate employment opportunities.

Finally, balance-of-payments data also are necessary for evaluating the programme of development and for revising targets when the external-payments situation calls for such revision.

The second type of data necessary for programme evaluation and target revision relates to the actual working of projects. Here also should be included data on the past performance of the different departments or ministries concerned, since such information can serve to indicate not only the "spending capacity" of these administrative units—which will naturally tend to set a practical limit to the size of the programme—but also where a strengthening of administration may be necessary.

Statistical standards and quality of data

As far as possible, it is desirable that the degree of error attaching to estimates in available data should be known. One particular point should be stressed in this connexion. In countries of the region, owing partly to improvements in the organization of statistical intelligence and partly to the gradual extension of money economy over the subsistence sector, the coverage and quality of existing data may be expected to improve with time. There may, therefore, be an upward trend in the historical series of output or of consumption which may be due to improved coverage rather than to any real growth. Care should be taken to take account of this spurious element when assessing the variation of a certain magnitude over a period of years.

Planning on the basis of inaccurate data may be worse than no planning at all, since such data may not only point to wrong solutions to problems but also create a false sense of complacency and lead to serious bottlenecks and rigidities. The formulation and application of proper statistical standards are, therefore, of great importance in elaborating a system of statistics for planning purposes.

The problem of statistical standards has been stated[1] as requiring, first, "a precise definition of each of the elements of a particular series"; secondly, "a systematic grouping (*i.e.* classification) of these elements"; and finally, "specification of the methods to be followed in constructing the particular series". The Statistical Commission of the United Nations has stressed the importance of formulating internationally acceptable statistical standards which may lead to continuing improvement in the quality of national statistics. Such internationally acceptable statistical standards have been prepared by the United Nations and its specialized agencies for use in the fields of population and vital statistics, agricultural statistics, mining and industrial statistics, external trade, balance of payments, transport, cost of living, labour statistics, national income, and finance.[2]

For the ECAFE region, the formulation of statistical standards with special reference to the varying needs of countries of this region has been considered by three earlier regional conferences of statisticians and two working parties.[3] The special requirements of data for planning purposes might usefully be discussed further.

The organization of statistical intelligence for planning

The problem of the organization of statistical intelligence is largely outside the scope of this paper.[4] But the relationship between the planning staff and the office or offices responsible for the collection of data has an important bearing on planning. While many statistics are produced as a by-product of an administrative process, if control over collection of statistics is divided between a number of administrative agencies, there may be overlapping, lack of co-ordination, and wasteful use of the limited resources of trained statistical personnel. It is, therefore, generally true that the task of

1. See *Handbook of Statistical Organization, Studies in Methods* (United Nations publication, Sales No. 1954.XVII.7).
2. See *Annotated List of International Standards for Statistics*, (E/CN.3/181), a document of the Statistical Commission of the United Nations, which contains an annotated list of statistical standards recommended by international agencies.
3. The first conference, held in January 1951, dealt with trade and balance-of-payments statistics; the second conference, in September 1952, with production and price statistics; and the third conference, in March 1953, with national income statistics. A fourth conference will be held in March 1956 on population and allied censuses. In addition, a working party on standard international trade classification was held in January 1952 and a workshop on budget reclassification in August-September 1955.
4. See *Handbook of Statistical Organization, op. cit.*

coordination and standardization of statistics is best discharged by a central statistical agency in close touch with the planning staff and, therefore, aware of the specific needs for data for planning purposes. It was stated at the outset that there is need, when a country is thinking of improving its statistics, for a blueprint of its intended scheme or system of statistics. Such a blueprint can best be prepared by the statistician, in consultation with the planner.[1]

Conclusions: Priorities in data collection

Priorities in the collection of data will be different for different countries, and few generalizations are possible concerning priorities in the matter of data collection. Development planning does not necessarily require many new types of statistics. For the most part, it requires good statistics of a type which is found useful for the formulation of public economic policies generally, and the utilization of such statistics from a new point of view and for a new purpose. However, the foregoing discussion does point to certain types of data as especially necessary, or relatively more useful than other statistical series, for planning in the ECAFE region, and a summary of some of the points that emerge may be useful.

To begin with, there appears to be in this region a more immediate and pressing need to improve the general quality and coverage of such data as are already collected in the fields of population, employment, production, trade, finance, and prices than to put data of questionable reliability together into the form of comprehensive national accounts. National accounts are useful, but the usefulness of all data depends directly on their accuracy. Hence, first priority ought to be given to such further development of statistics within the fields mentioned above as will lead most directly to insight into the determinants of economic growth.

Where new data are to be collected, it is important to underline the special characteristics of the region, and to collect data with the type of break-down necessary for planning in the countries of this region. Thus, in collecting data on output, distinction may usefully be made between the marketed part of the output and the part not entering into any monetary transactions; in collecting data on capital formation, a distinction may be made between monetary and non-monetary forms of capital formation; in collecting data on consumption, similarly, a distinction may be made between market purchases and consumption of one's own output.

Secondly, after progress has been made with the improvement of existing statistics, efforts should be directed toward securing data that will assist in evaluating the impact of a development programme on the economy. The point has been made earlier that where over-all aggregates like national income, capital formation, etc. cannot be measured with sufficient accuracy, data may still be collected on various indicators to show the changes in these magnitudes. Such data will facilitate the evaluation of the impact of a programme and may, in addition, help make possible the formulation or re-formulation of a development programme.

However, a fully-integrated development programme calls for more than information on changes at the margin. In the last analysis, after progress has been made with the improvement of existing data relating to different aspects of the economy and with the indication of changes in the aggregates in the economy statistics relating to national accounts—with all break-downs—need to be developed. It is likely that most of the basic data required for this purpose will, at that stage, be available. With the improvement of existing data, both the coverage and the quality of data required for the construction of national accounts will have improved. Again, some of the data required will have emerged in the process of collecting data on changes in the important aggregates.

In conclusion it may be stressed that, while it is necessary to make the best use of whatever data exist, integrated development planning for an economy, if it is to be soundly carried out, must eventually proceed on the basis of a picture of the economy as a whole such as is provided by a system of national accounts. Thus viewed, the need for collection of new data tends to be defined, for each country, by the gaps in statistics required for the construction of its national accounts.

1. Co-ordination in the collection of statistics for planning has been secured in Burma by actually placing the Central Statistical and Economic Department—in charge of co-ordination and standardization of statistics—under the Ministry of National Planning. For further details, see "Problems and techniques" *supra*, p. 62.

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